THE JOURNAL
of the
OKLAHOMA STATE MEDICAL ASSOCIATION

EDITORIALS

THE JOURNAL JACKET

Those who read *The Journal* regularly will be interested in the new cover design.

The members of the Editorial Board believe that an attractive, dignified cover carries reader appeal and helps to give *The Journal* its rightful place among the official publications of other State Medical Associations.

Credit for the artistic arrangement of the title and the Association Seal goes to the Editorial Assistant, Miss Mary Lou Crahan, and her consulting artist.

The color of the solid background may be changed from time to time to please the eye and avoid monotony.

The readers of the Journal may rest assured that the Editorial Staff is ever giving more serious attention to what comes between the covers and that comments and criticisms are welcomed.

YOUR COUNCIL MEETING

How enlightening it would be if all the members of the State Medical Association could attend the Council meetings and see and hear the earnest deliberations of this body.

If this were possible, the membership would be better informed and better satisfied with the work of the Association. They would be surprised to learn of its many interests and proud of the way its obligations are being met. With full information about the many activities carried on by the officers, committees, executive staff and office personnel there could be no question as to the necessary expenditures.

The wisdom of those who plan the program and make the budget is proved by the results achieved.

The dues paid are relatively small and those who understand the function of organized medicine and are familiar with the work of our own State Association never complain of the cost. Those who voluntarily do much of the Association's work without monetary remuneration should have the wholehearted support of the membership.

In the last analysis the future of medicine depends upon the individual members of the profession. Our ability to preserve the traditional integrity of medicine will depend upon our response to a changing world. With a broad vision and a wise tolerance we must meet the present mass psychology with reference to socio-economic conditions. The public must be convinced that we are going to solve the problem of medical care. While the weight of our influence must be felt by the patient in the patient's home and in our respective communities, it is equally important to see that it channels through the agencies of organized medicine. The Council, the House of Delegates and the executive office must have material as well as moral support. Through these agencies we must supplement our efforts to educate the patient by education of the public As Plato suggested, we must make education so perfect and so effective that legislation will be superfluous.

PHYSICIANS INCOME

The office of Business Economics of the U.S. Department of Commerce and the Bureau of Medical Economics Research of the American Medical Association started a study to gather information about physicians' incomes. The Board of Trustees of the American Medical Association authorized cooperation with the U.S. Department of Commerce. It is claimed that this survey has nothing to do with the Department of Internal Revenue. It is understood that more than 125,000 physicians will be canvassed. Apparently there is no reason why physicians should not cooperate fully.

The importance of a cross section of physicians' incomes is conceded. Particularly is it desirable for physicians in the lower income brackets to respond when the blanks are received.

EUTHANASIA

Apropos the recent widespread interest in mercy killing we copy the following from the *Journal of the Kansas State Medical Society* and gratefully acknowledge our indebtedness to our worthy neighbors:

"The Council of the Kansas Medical Society, at a meeting held March 5, passed a resolution on the subject of mercy killings. The resolution was subsequently released to the press and radio stations in Kansas and received wide publicity. The text is as follows:

" 'The physician upon completing his training Promises to uphold the ideals of the ancient oath of Hippocrates by saying, '. . . I will give no deadly medicine to anyone if asked, nor suggest any such counsel . . .'

" 'He is dedicated to the preservation of life — he has neither professional, nor legal nor moral right to willfully cause the death of any person.

" 'The Council of the Kansas Medical Society reaffirms the position of the medical profession to serve humanity in the prevention and cure of disease, in the prolongation of life and without qualification condemns the practice of mercy killings.' "

1. Journal of the Kansas Medical Society. Vol. LI, No. 5, May, 1950. page 241.

CORTISONE AND A.C.T.H.

Six months ago in an editorial appearing in this *Journal*, the writer ventured to say, no phase of this therapeutic puzzle is "so acute that the profession at large cannot await further investigation in this highly specialized field. The physicians' reputation and the patients' welfare should have careful consideration before treatment is initiated."

The phenomenal effects of this new therapeutic agent upon the human organism and many of the pathological conditions which assail it have astonished the medical world, aroused unwarranted hope in the hosts of affliction and serious cogitation among the more conservative members of the medical profession.

Astute endocrinologists witness medical miracles approaching those of Divine origin and marvel at the strange phenomena and their inability to interpret and explain what is going on in an organism more complicated and more mysterious than they had imagined. One of the most renowned in this specialty said, "How puzzling this new therapy which helps everything and cures nothing."

It is astounding to see the otherwise helpless victims of arthritis after a brief period of treatment go up and down steps like a Greek athlete and then following the omission of a few doses it is equally astounding to see them ease over the steps like a stray dog after having been chewed up in the market place. What a painful disappointment.

There are many side effects as illy defined and poorly understood at those operating directly upon the pathological conditions.

The following from a well known and highly respected internist deserves careful consideration. After the recent meeting of the Association of American Physicians at Atlantic City this great clinician said, "Judging from the papers presented, the sun of enthusiasm over cortisone and A.C.T.H. definitely is beginning to sink so far as its use as a remedial drug is concerned and the twilight of uncertainty is commencing."

No doubt much research and good will come out of this uncertainty. In the meantime physicians should make sure no harm is done with this uncertain therapy.

MEDICINE IN THE NEWS

When Dr. Leonard Scheele, Surgeon General of the United States, presented the 1949 Lasker Award for medical reporting to William L. Lawrence of the New York Times, he made this significant statement:

"Medical science has never before so much needed the responsible and accurate writing in the newspapers and magazines."

It is doubtful if ever before there has been so much medical writing for newspapers and magazines. The phenomenal progress in medicine should be reported, but by informed conservative reporters.

The daily papers and the popular magazines are full of premature medical publicity. Because of this the Journal carries a department for the purpose of listing, reviewing and criticizing some of the articles of importance to physicians and patients appearing in popular magazines. The chief object of this department is to alert physicians as to what their patients may be reading, whether good or bad.

BABIES FOR ADOPTION

If state laws fail to provide protection for babies born out of wedlock; if human depravity overrides popular opinion to the point of operating a shameful adoption racket in the very midst of our good citizens, let us hope that no members of the State Medical Association are implicated, innocently or otherwise.

Repardless of moral issues and not withstanding man-made laws these innocent infants are human beings and entitled to humane consideration. The responsibility of doctors who bring them into the world does not end with their birth. All physicians who have any connection with these maternity homes with adoption schemes or who are drawn into them for needed professional services should know what is going on, and keep their hands and hearts clean. Their obligations reach from the newborn babe through the public to the profession. The welfare of the child, the reputation of the community and the good name of the medical profession may depend upon the doctor's actions. His knowledge, his influence and his energy should be employed in behalf of the legitimate handling of illegitimate children. The good citizens of the state and their elected lawmakers may count on the physicians who are rightfully entitled to the designation of M.D., for support of proper regulatory measures. At the same time all true physicians would appreciate protection against quacks and impostors who pose as doctors without the legal title of M.D. According to recent newspaper reports some of the adoption rackets are in the hands of such so-called doctors. Apparently there is no way to definitely clarify in the public mind the meaning of the widely employed and seriously overworked designation, "Doctor". Present laws provide that in the healing arts the unauthoritative employment of the term makes the guilty party subject to prosecution and penalty.

THE DOCTORS HELPED TOO!

Under this title we received the following statement from Dan Hollingsworth, who is the genial and efficient manager of the Oklahoma City Safety Council. Having won first place in its own group twice in succession, Oklahoma City also won the 1949 Grand Award in competition with all the cities in the United States, tying with Lansing, Michigan. Mr. Hollingsworth's special recognition of the part played by the medical profession is greatly appreciated.

"We must admit that were it not for the advances made in the medical field and the interest shown by the medical profession our present street and highway death rate would be much higher than it is.

"Policemen, who have been picking up the pieces for a goodly number of years, recall that today the doctors are saving many lives in emergency rooms and operating rooms of our hospitals in injury cases which, 15 or 20 years ago, were not saved. This is particularly true in shock and head injuries.

"The topic of what the medical profession can do today in the traffic accident injury case is common among police groups. For example: in the keeping of records on serious injury cases one 'off the record' listing is 'expected to die'. When a youngster is seriously and critically injured and alive at the end of 48 hours, that person is removed from the 'expected to die' list.

"In a light, but complimentary, way, many police groups kid with each other that one town has a better safety record than another one, because they have better doctors. But when honors come the cooperation and services of many individuals and groups are publicly acknowledged, the doctors are never mentioned."

FEAR AND WANT

How foolish to wish upon a people still struggling for physical competency the illogical concept of fear and want. These two words serve as the buttresses to the master word — work. Sir William Osler not only bestowed this name upon the wonder word but he animated it with his restless critical intellect ever surging for more knowledge with which to feed the souls of people who suffer from fear and want.

He knew that the only sustaining nutriment must come through work. It was his task to make use of every golden moment in order that he might pass the stimulus on to others. Today he lives in the hearts and minds of millions because he knew the value of the master word — because he worked. It is better to die striving than to live surfeited with the earnings of other people.

SCIENTIFIC ARTICLES

SELECTION OF BLOOD DONORS

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The therapeutic value of any blood transfusion is determined by the donor's state of health and the quality of his blood. The blood must not only be compatible with that of the recipient but also of such quality as to benefit the patient.[19] Because every blood donor may potentially be a source of disease, the health of the donor should be perfect. Every safeguard should be taken to eliminate any donor who is harboring a latent infection, early blood dyscrasia, or is in a state of lowered general health.

With the return of the professional blood donor, and the disappearance of the volunteer donor who gave blood without the need of financial return, has also come the need for more objective evaluation of blood donors. Subjective examination and cursory hemoglobin and serological tests are not sufficient to screen out the unscrupulous professional donor urgently in need of funds. Therefore, every means should be employed in examining the donor and in the laboratory evaluation of his blood to make certain recipients do not receive blood from a donor carrying a masked, asymptomatic disease.

Formerly, direct transfusion methods gave the physician administering the transfusion an opportunity to examine the donor. Today, the average donor has no contact with the recipient and rarely sees the physician administering his blood. Instead, 1,650 blood banks impersonally service more than 1,000,000 pints of blood yearly, a blood transfer involving one million recipients who have no personal knowledge of the identity, race, age, sex or health of the donor. This responsibility rests with the blood bank and physician to closely screen all donors.

DISEASE TRANSMISSION BY TRANSFUSION

The importance of cautious donor selection is pointed up by the danger of disease transmission by transfusion, a complication long feared by physicians. This apprehension stems from the reports in the medical literature of the transmission of leukemic blood,[7] syphilis, [14 19] malaria,[6 14 19] measles,[1 9] smallpox,[2] septicemia,[11] typhoid fever,[12] gonorrhea,[13] influenza,[15] relapsing fever,[2] allergic hypersensitiveness,[14] from donor to patient by transfusion.

Because of its high incidence, 4.5 to 7.2 percent, infectious hepatitis (homologous serum jaundice) has posed a special problem in plasma transfusions. Hartman[10] has recently devised a new technique for destroying the virus by treating whole blood and plasma with nitrogen mustard, materially reducing the danger of this complication. Plasma is being treated in some centers with ultraviolet irradiation which has also proven effective against this virus disease.[20]

But until some universally effective method of blood sterilization is available, the selection of blood donors is the most effective preventive measure against transmittable disease. Every scientific means should be utilized in eliminating the donor harboring latent disease.

PHYSICAL REQUIREMENTS OF DONORS

The physical examination of blood donors is often inadequate. Frequently, because the donor is a relative or friend, the physician is reluctant to ask him to submit to a physical examination. However, Wiener[19] has traced most of the cases of syphilis transmission to the so-called "family" donor. "Prospective donors, whether professionals, friends or relatives should be questioned regarding the possibility of transmissible disease and subjected to a *careful* physical examination."[14]

In California, the objective of a donor's health are: weight, blood pressure, temperature, hemoglobin, and a negative serological reaction for syphilis. The donor's subjective statements are used as the primary basis for his eligibility. The form below is one fulfilling the California Administrative Code requirements.

*From the Department of General Surgery, Division of Oncology, College of Medical Evangelista School of Medicine, Los Angeles, California.

BLOOD DONOR

Use ink or indelible pencil

Please answer accurately for your benefit and that of the patient who receives your blood.

Any chronic or serious illness?..... If so, what?..... Illness in last month?..... Cold within a week?..... Were you in Armed Forces?..... If so, where stationed?..... Any form of heart trouble?..... Malaria?..... Undulant fever within 5 years?..... Diabetes?..... Jaundice at any time?..... Clinical pulmonary tuberculosis?..... Pregnant or post partum 9 months?..... Have you given blood?..... If so, last date?.....

Donor's Signature .....

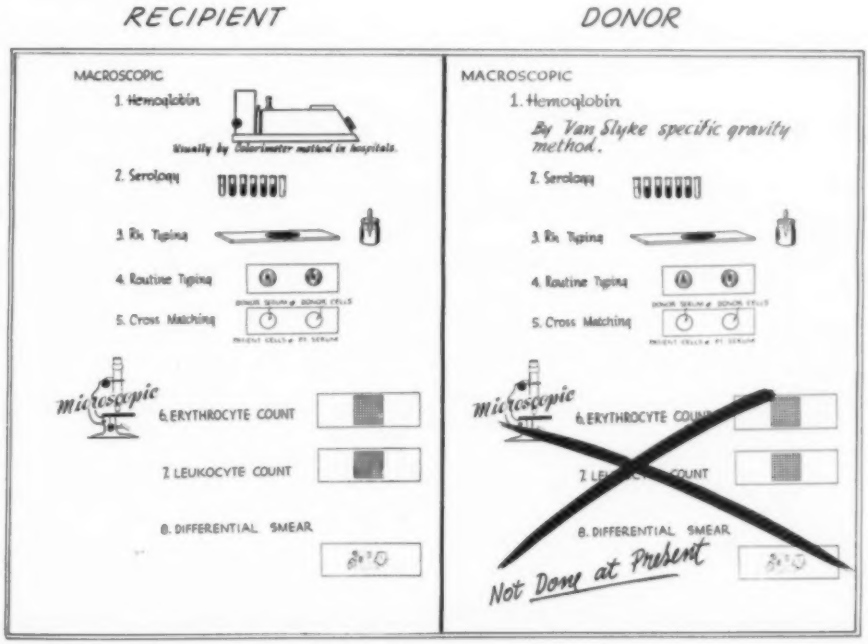
"It is the general practice to accept as blood donors both men and women between the ages of 18 and 60 who *assert that they are in good health.* Physical examination is usually very superficial . . ." but "inspection of the male genitalia for chancre should be obligatory."[18]

Because the viability of the malaria parasite is longer than 96 hours[6] in stored bank blood, all donors who have ever had malaria should be rejected. At present, the donor's history is the only check made, very few blood banks do malarial blood studies.

LABORATORY EXAMINATION OF BLOOD PRIOR TO TRANSFUSION

Most hospitals make rather extensive blood studies of a recipient's blood, but blood banks do not examine a donor's blood microscopically before transfusion. The tests usually made on a patient's blood are: (1) a serological reaction, (2) a hemoglobin determination, (3) a complete blood study including erythrocyte count, leukocyte count, stained differential blood smear, and before transfusion (4) typing and cross-matching, (5) Rh typing.

A donor's blood receives *no microscopic examination.* In California[4] it receives these macroscopic tests: (1) hemoglobin determination, (2) serological test, (3) typing and cross-matching. The recipient's blood receives more careful microscopic scrutiny than the donor's blood which is to be mixed intravenously with the recipient's. At present, no leukocyte count, erythrocyte count



or examination of a stained differential smear is made on a donor's blood sample.

The most popular hemoglobin determination in blood banks is the rapid Van Slyke specific gravity method. In this test, a drop of donor's blood is allowed to fall into a standardized solution of copper sulphate. The drop of blood will sink rapidly if it is normal or *above* normal in hemoglobin content.

One shortcoming of this test is that it does not disclose diseases in which hemoconcentration or hyperproteinemia exists, i.e., polycythemia rubra vera, multiple myeloma, dehydration and other diseases having a hyperproteinemia. In polycythemia rubra vera the blood specific gravity varies between 1.075 and 1.080 and would readily pass the Van Slyke test for normal hemoglobin.

The blood of a dehydrated alcoholic or undernourished donor frequently gives a normal hemoglobin reading by the Van Slyke method. Actually the donor may be anemic, hemoconcentration and dehydration accounting for the high specific gravity of the blood. Therefore, a microscopic blood study is indicated in such donors who often appear at commercially operated blood banks in the "skid row" districts of larger cities.

IMPORTANCE OF DIFFERENTIAL BLOOD SMEAR

The stained differential smear would materially aid in evaluating a donor's health. It would help to uncover asymptomatic illness during its latent or incubation period. A leukemia patient, for example, may be a robust person in good health prior to the appearance of anemia.[17] And only a differential slide study will detect leukemia in its earliest phases.[8] Diseases showing alterations in the morphology or number of leukocytes prior to the appearance of symptoms would be discovered by this study. Into this category fall such diseases as infectious mononucleosis, tuberculosis, virus infections, childhood diseases — whooping cough, measles, mumps, chicken pox.

The blood donor harboring a latent infection could be spotted by a Shilling "shift to the left," leukopenia, or relative lymphocytosis on the blood smear.

The stained differential smear is also of medico-legal value. The blood bank careful enough to file the slide preserves a record of the donor's blood picture at the time of donation. Should a question ever arise regarding the donor's health, the blood bank may produce the slide — a far more valuable piece of evidence than a typewritten report.

RECOMMENDATIONS

To further safeguard the recipients of blood transfusions and to elevate the standards of blood banks, a closer screening of blood donors is advocated. The following are recommended as adjuncts to standard blood bank procedures:

1. *Medical History*: The practice in most blood donor stations of having a female technician ask routine questions of the male donor is apt to place him on the defensive. His desire to make a good medical record will be especially apparent if he is a professional donor in need of funds. He will usually answer questions regarding transmittable disease in a manner which will benefit him — not the patient.

An inquiry into the symptoms of a disease may frequently disclose a positive history. Whereas the mere asking: "Have you ever had syphilis?" will draw out a negative reply. Questions regarding penile or skin lesions, periodic chills and fever, night sweats or persistent cough, yellow discoloration of the skin, extreme thirst or sugar in the urine, and shortness of breath are more likely to be answered in the affirmative should syphilis, malaria, tuberculosis, infectious jaundice, diabetes, or heart disease be in the patient's medical history. Male technicians should question male donors.

Specific questions regarding blood dyscrasias should be asked: "Have you ever had swellings of the glands in your neck, under your arm, or in the groin? Painful enlargement of any organs in the abdomen, i.e., liver or spleen? Any bleeding tendency? Blood disease in your family? Leukemia? Polycythemia? Has your skin ever been dusky or bluish in color? Cancer in any organ or the blood?"

The ultimate aim, to make the evaluation of the blood donor as objective as possible, is difficult to achieve by history alone.

2. *Physical Examination*: This must be brief, but should be a part of the screening process. To facilitate such an examination, donors of the same sex should disrobe and be examined under good light. A physician can rapidly pass along a line of donors examining them for mouth and throat lesions; their skin for infectious lesions or exanthemata; cervical, axillary and inguinal

regions for lymphadenopathy; the abdomen for splenic or hepatic enlargement.

3. *Microscopic Examination of Donor's Blood*: The stained differential blood smear is the most important single examination which can be made on the donor's blood. The only method which detects early leukemia, it may also uncover latent infectious processes. It offers information regarding the quality of erythrocytes which cannot be obtained by the Van Slyke specific gravity hemoglobin determination. Hypochromia, hyperchromia, anisocytosis, poikilocytosis, nucleated red cells, and rough estimation of the number of platelets may only be observed on a stained smear.

Any procedure which artificially places a new variety of blood into a patient's veins should include every precaution to ascertain the state of the transfused blood cells. The stained differential smear is the best means now available for obtaining this information.

The rewards for such a microscopic blood study would be: (1) To provide the blood bank and physician with a definite blood picture and indication of the donor's health at the time of blood donation. (2) To assure the donor of his own health. (3) To eliminate donors with latent infections. (4) To provide a permanent medico-legal record of the donor's blood picture. (5) To assure the recipient that the blood he receives is of such a quality as to benefit him and has been examined by every known scientific means to assure that safety.

4. *Ultra-violet Blood Irradiation*: The irradiation of plasma has been found effective against the virus of infectious hepatitis (homologous serum jaundice).[20] It may be found lethal to other viruses latent in bank blood, i.e., common cold, influenza, childhood diseases. Studies should be made to determine the feasibility of irradiating whole blood used for transfusion.

CONCLUSIONS

The selection of blood donors should be on an objective basis, so far as possible. The carelessly examined blood donor, whose subjective history is the basis for his eligibility, is potentially dangerous. His blood, if used for plasma pooling, can spread disease to hundreds should he be harboring a disease such as homologous serum jaundice in its incubation period. Therefore, every precautionary measure should be instituted to screen out the blood donor harboring latent disease.

Physical examination and the differential stained blood smear are advocated as objective criteria for the closer screening of blood donors.

SUMMARY

The carelessly selected blood donor is potentially dangerous. The transmission of disease by blood transfusion cannot be minimized. Objective criteria must be used in selecting the professional blood donor who is in need of funds, for his subjective history cannot always be relied upon. Therefore the following safeguards are recommended: (1) Medical history based on symptoms. (2) Physical examination of all donors, professional, relative or friend. (3) Microscopic study of donor's blood. (4) Possible use of ultra-violet irradiation of blood used for transfusion.

The differential blood smear is the most important single blood examination to evaluate the donor's health. It is invaluable in unmasking latent infectious diseases and blood dyscrasias.

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PARASITIC DISEASES AND PROBLEMS IN DIAGNOSIS*

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The term "parasitic disease" is so broad it requires defining. In this paper it will be applied to the protozoa and worms parasitic in man. The number of diseases to be considered will be limited further by confining the discussion to the forms indigenous to this state.

Malaria is the most important parasitic disease of man. When the various states are arranged in order by the number of cases of malaria it is interesting to note that in recent years Oklahoma has changed from ninth to fourth or fifth place. This is not as ominous as it sounds. Actually malaria is decreasing in the state and the change in our relative position is due in part to effective control programs in states with a greater malaria problem.

As far as parasites are concerned, it is believed that the intestinal forms are the biggest problem in Oklahoma. They are common certainly and are overlooked often. As a general rule making a laboratory test for parasites is not a popular pastime. It is time consuming and smelly. There are relatively few people who have received adequate training in the techniques and have had practice enough in the differentiation of the organisms. This applies particularly to *Endamoeba histolytica*. As a result many feel that they are not prepared to make a satisfactory diagnosis, so why bother. It happens sometimes that a diagnosis is made by a qualified person and the patient takes this information to his physician. The patient is asked if he has symptoms of dysentery. Usually the answer is "No", so the matter is either dropped or a sample is turned over to the office girl-technician and the report is apt to be negative. If a physician decides to have stool samples done routinely a large number of them will be reported as negative, or as having only non-pathogenic forms present. He may get the impression that the tests are not worthwhile. As far as the patients are concerned the laboratory tests are expensive so the doctor must select the patients most apt to benefit by them. This offers a difficult problem because the symptoms are vague generally, and non-specific.

Before going further in this vein it might be well to look at some of the information we have on the prevalence of these parasites in Oklahoma. Some data that have never been published are available, and I will take this opportunity to present them. From 1939 to 1943, at the University of Oklahoma School of Medicine, we examined samples from 4,660 Oklahomans. The survey was started in school children in the eastern part of the state (McMullen and Gray, 1941). Later nearly 2,000 samples were obtained from school children in and near Oklahoma City. The school districts in the city were selected so that we had samples from the worst areas, up to the best.

It is well known that school children carry more parasites than adults. To get a more representative sample of the population, university students and miscellaneous adults were examined also. All but six counties of the state were represented in our series. Most of the people examined were whites but Indians and Negroes were included also. The group examined did not represent a cross section of our population but it included certainly a great many persons who will come in to see a doctor.

The samples were sent to the laboratory as quickly as possible and most of the work was done in the cooler months. The zinc sulphate floatation-centrifugation method of concentrating the parasites was used on all samples and the smears were stained with D'Antoni's iodine solution. Usually only one sample was examined from each person. It must be remembered that if additional

*Presented by invitation before the Laboratory Section at the Annual Meeting of the Oklahoma Public Health Association, Oklahoma City, December 15-17, 1949.

samples had been examined more cases would have been found. The figures given below, therefore, must be considered minimal.

One or more species of parasites were found in 49.7 percent of the persons examined. Out of the 2315 positive stools there were 3452 parasitic infections. This difference was due to multiple infections. Double infections were common. Triple and quadruple infections were not rare and several stool samples contained five different parasites. In some of the latter there were sometimes three pathogenic forms. As would be expected most of the infections were those of *Endamoeba coli* and other non-pathogenic protozoa. When it is understood that these forms can be acquired only by eating materials contaminated with feces, the knowledge of their presence is of interest from a health standpoint.

Of the pathogenic forms, 206 persons were found to have *Endamoeba histolytica*, 397 with *Giardia lamblia*, six with *Strongyloides stercoralis*, 65 with hookworm, six with *Ascaris lumbricoides*, four with *Trichuris trichiura*, two with *Taenia* sp., 143 with *Hymenolepis nana*, and one with *Hymenolepis diminuta*. Sixty-three of the stools contained the eggs or adults of pinworm. As you know, stool samples are of little value in detecting the presence of this parasite. Smith and Richardson (1947), two senior medical students, examined 117 children in Crippled Children's Hospital in Oklahoma City, using the scotch tape swab, and found 33.3 percent infected with pinworm. It is possible that this rate was higher than would be found in the general population, but it is safe to assume probably that 500 to 1000 of our 4,660 persons had pinworm. A total of 793 infections that deserve medical attention actually were found. If you add the number missed because only one sample was examined, and the probable number of pinworm cases, the total is rather surprising.

By breaking down the group in various ways it is possible to find out where to look for most of the infections. When the sexes are compared the incidence is about the same. In rural areas the incidence was 54 per cent, as against 45 percent in urban districts. When separated by races the Indians had the highest rate with 67 percent. The incidence in Negroes was 50 percent and in whites 46 percent. The difference between whites and Negroes was not significant. When examined by age groups we found the highest rates in school- and teen-aged children. The pre-school aged children had the lowest rates.

A comparison of the various school districts in Oklahoma City gave some interesting results. At Walnut Grove School, in the poorer part of the city, 72.1 percent of the children were found to be infected. At Wheeler School, the incidence was 50.8 percent; Irving School, 34.8 percent; Whittier School, 29.6 percent; and Horace Mann School, 26.2 percent. The latter is in the newer, more modern part of the city. Even there more than one out of four youngsters was infected. At Britton, just outside the City limits, the incidence was 35.1 percent. By comparison, 34.9 percent of the students at the University of Oklahoma Medical School were infected with intestinal parasites.

It will be noted that the most prevalent parasites present in this state are those that are transferred directly, i.e., the protozoa, pinworm and dwarf tapeworm. The cysts of the protozoa and the eggs of the two worms are infective as they leave the body. They are easily passed from person to person in families, at school and by food handlers. The parasites such as, hookworms, *Strongyloides*, and *Taenia* that require development in the soil or in intermediate hosts, are relatively scarce in the state.

The results of this survey and those of Gregg and McClintock (1947) in southeastern Oklahoma emphasize the fact that parasites are relatively common here. It follows, therefore. that if we do not find them in our examinations something is wrong. It is granted that we need better methods for examining stool samples and simpler ways of distinguishing between the pathogenic and non-pathogenic protozoa. Until these have been discovered we must use the best we have. There are three general methods now in use. Time can be saved and the accuracy of the diagnosis can be increased if these are used intelligently. They are as follows:

1. Direct smear — Primarily of use in looking for the trophozoites of protozoa in samples that are still warm, liquid or semiliquid in nature. They should be examined in warm saline or stained with hematoxylin.

2. Zinc sulphate floatation-centrifugation — An excellent method for concentrating cysts, eggs and larvae. The smear made from the floated material is stained with D'Antoni's iodine solution.

3. Culture — Useful in the diagnosis of *E. histolytica*. This method is being used more widely, especially in cases difficult to diagnose by the first two methods. It requires more time than the above but it picks up a larger number of cases.

In summary it can be said that intestinal parasites are relatively common in Oklahoma and are missed often when the fecal samples are examined. Some of these deficiencies could be corrected if better basic training were given to physicians and medical technologists. The average physician is not convinced that parasites are a problem and that he can do much about them. The average medical technologist does not get adequate training nor sufficient practice to be efficient.

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DANGEROUS POST-PARTUM BLOOD LOSS FROM FIRST DEGREE LACERATIONS

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Since hemorrhage has remained a major cause of maternal mortality (30 per cent to 31 per cent of all maternal deaths, 1945-47) this complication of pregnancy has become, and rightly so, a popular topic of obstetrical papers. These papers practically always stress uterine atonia or inertia, retained secundines and cervical and deep perineal lacerations as the causes of major post-partum hemorrhage endangering the life of the patient. Rarely are minor, first degree lacerations mentioned or, if so, they are passed over briefly without discussion.

It is the purpose of this writer to discuss the danger of hemorrhage from minor, first degree lacerations, lacerations that are frequently described in delivery notes as "insignificant, mucosal laceration, repair not necessary" or lacerations that are missed entirely in a rapid examination of the perineum following spontaneous delivery. A case is presented as an example of this danger.

The common site of first degree lacerations are illustrated in Figure 1. They are: (1) posterior fourchette, (2) lateral vaginal wall, (3) labia minora, (4) area surrounding the urethral orifice and (5) prepuse of the clitoris. Usually mucosal separation in these areas will cause little or no bleeding and, as a result, are rarely repaired. They have a tendency to heal readily and practically never become infected. Because of the insignificance of these tears the obstetrician and general practitioner inspects them briefly and may not take the time to wait to see if they continue to bleed, or else the separation is so small that it is missed entirely.

Occasionally, however, these minor tears will be through a varicose vein and bleeding will continue until controlled by compression or ligation. In relation to the lacerations listed above these varicosities are usually found at the posterior fourchette, vaginal wall and labia minora.

The laceration near the urethral orifice or in the area of the clitoris may be into one of the many superficial, dilated venules. The vestibular bulbs which lie under the bases of the labia minor and meet under the clitoris are masses of highly vascular tissue. The blood supply to this area is so generous, especially during pregnancy, that the operator frequently finds he has perforated a second vessel with his suture needle and must place a second or even a third suture before all bleeding is controlled.

The following case demonstrates the dangers just described:

M. B. a 21-year-old Navajo woman, gravida two, para one, was admitted to the obstetrical service on April 11, 1949. Although her L.M.P. was June 10, 1948, mak-

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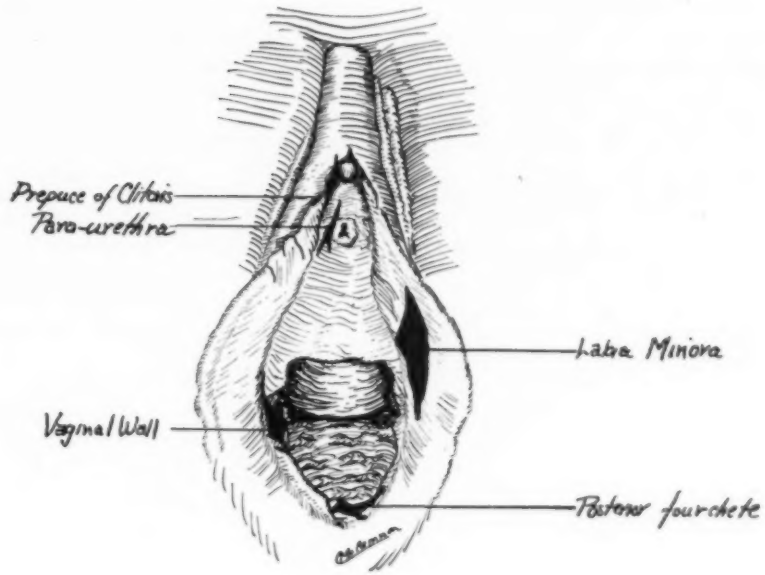

Most Common Sites of First Degree Lacerations

ing her E.D.C. March 17, 1949, it was felt after examination that she was not at term and that the expected date was probably after the 15th of April. Because her home was in an isolated area of the reservation she was permitted to remain in the hospital to await labor and delivery. Spontaneous labor had not taken place by April 30, 1949, so medical induction was successfully initiated.

After an easy labor of five hours, rectal examination revealed the cervix to be effaced, eight centimeters dilated with the vertex presenting as a ROT at the level of the spines. She was transferred to the delivery room where, after the usual surgical preparation, she delivered spontaneously an apparently normal female infant weighing seven pounds and two ounces. The placenta was delivered immediately as a Schultz. Ergonovine and pituitrin were given intramuscularly to maintain good uterine contraction. Blood loss was mild, and the patient was returned to the ward in good condition. Examination of the perineum following delivery had revealed no lacerations. Delivery occurred at 5:30 p.m., April 30, 1949.

There is described in the Nurses Notes during the next 16 hours that "there was slight bleeding" that "the uterus remained firm." However, it was noted with each perineal care that small, fresh blood clots were passed. It was necessary for the writer to be out of town for six hours the following afternoon and, the ward nurse discovering many large clots and fresh bleeding at 2:00 p.m., called another physician to see the patient. The patient was given vitamin K intramuscularly, intramuscular ergonovine and an ice pack was placed abdominally above the fundus, which was described as being moderately firm. Two hours later a second physician was called to see the patient because of continued bleeding. He was not impressed by the amount of bleeding but gave pituitrin intravenously and massaged the uterus for a few minutes. His note stated that the uterus did not feel spongy.

One hour later when the writer returned the situation was explained to him. At this time the patient complained of feeling weak and cold and she was thoroughly frightened by her continued bleeding. Intravenous fluids were started while she was typed and

cross-matched for a transfusion. The blood pressure at this time was 90/50 and the blood hemoglobin value was nine grams per cent. She was taken immediately to the delivery room and prepared for sterile examination. It had been noted previously that she was not having profuse bleeding and at no time had the fundus been described as spongy. With these facts in mind, it was thought that she was probably bleeding from a cervical laceration. Under nitrous oxide and oxygen anesthesia the cervix was exposed and carefully inspected. No laceration was found and it was further noticed that there was no bright bleeding from the fundus. At this time it was discovered that fresh blood was collecting on the upper surface of the superior blade of the spectulum. The uterine cavity was examined satisfying the operator that there was no retained placenta or membranes. Examination as to the source of external bleeding then revealed a 0.5 centimeter laceration of the inner fold of the prepuse of the clitoris. Bleeding was in a small, steady flow but it was easily controlled by one figure of eight suture of 000 atraumatic chromic catgut.

The patient was transfused to replace her blood loss. The remainder of the post-partum course was uneventful and she was discharged in good condition on her fifth post-partum day.

COMMENT

It is felt that the bleeding in the above case failed to stop either because the vessel was incompletely severed and could not retract or the mucous membrane separation was so shallow that the vessel could not retract and form a clot, or else the clot was removed each time the patient received perineal care. The failure to form a clot because of inability to retract seems the most likely explanation for the continued bleeding.

Even with first degree lacerations of the perineum good obstetrical technique means "save blood"; good surgical technique demands immediate repair of lacerations to prevent blood loss and to encourage rapid, primary healing.

SUMMARY

A brief discussion is presented on the dangers of minor, first degree perineal lacerations, and a case is presented to demonstrate these dangers.

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THE TREATMENT OF CLUBFOOT

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The purpose of this paper is to present certain factors in the treatment of clubfoot which in the author's experience have been important in reducing the tendency to recurrence. The ideas expressed relative to the equinus deformity may or may not be original, but if they have been exercised before it has not come to his attention from a review of the literature or from observing patients under active treatment by other orthopedists.

The proper sequence of the various corrections from the respective component deformities of clubfoot has been presented many times, namely, the forefoot adduction, the ankle varus and, finally, the equinus. Too, it has been stated that it is necessary to overcorrect each of the deformities. But just how far to overcorrect has not been definitely stated.

It is not unusual for orthopedists to see feet which have been sufficiently corrected to meet with the above definition, only to have a high percentage of recurrence with

subsequent castings necessary. The process may have been repeated until the patient was too old to be benefited by further manipulation and then surgery became the only resort.

It would appear that the greatest error in the treatment of clubfoot among orthopedic surgeons is not a lack of thorough understanding of the pathomechanics, but rather an incompleteness in carrying out the necessary procedures.

It is absolutely necessary to correct the forefoot adduction before attempting equinus correction, as the scaphoid, or its cartilaginous precursor in the infant, lies in an abnormal position on the medial aspect of the head of the astragalus and will be locked tightly against it by dorsiflexing the foot. It will then be impossible to slide the scaphoid anteriorly around the articular surface of the astragalar head. This will not only defeat correction of the forefoot adduction, but in so doing will also preclude correction of the ankle varus. Actually, it has been helpful in some cases to increase the equinus during the initial correction of the adduction, because in so doing the scaphoid is separated from the astragalus and the foot can be mobilized laterally with greater facility.

The final criterion of complete correction of the forefoot deformity lies in the findings on antero-posterior x-ray projection. Correction may be considered complete only when the os calcis has been mobilized laterally to its normal position and is no longer superimposed by the shadow of the astragalus. In the normal position, a line projected through the long axis of the astragalus passes through the first metatarsal.

In this regard, the author once heard a well-known orthopedist tell a group of medical students — in an attempt to simplify understanding of the deformities of clubfoot — that they might consider the astragalus to have been dislocated on the foot. This type of faulty thinking can only lead to faulty therapy. Nothing could be farther from the truth than this explanation for clubfoot. The fact is that the entire forefoot and os calcis are subluxated with relation to the astragalus and the rest of the body. The astragalus is not abnormally positioned, for it is fixed firmly by the ankle mortise. This is proved by noting the changes that take place with correction, for the scaphoid slides around to the front of the astragalus and the os calcis moves from beneath the astragalus, the latter bone meanwhile remaining stationery in regard to the tibia.

Very little need be said about the ankle varus, for if the forefoot deformity is properly corrected, the ankle will automatically swing into valgus as the forefoot swings across the sagittal midline of the leg. It is doubtful whether the ankle varus could be maintained intentionally while overcorrecting the forefoot varus. The reasons for this are as follows. First, the heel must be grasped firmly by one hand and counterpressure exerted against it while the forefoot is manipulated laterally by the other hand; the midtarsal joint opens medially and angulation of the long axis of the foot takes place at this point. The os calcis is forced to slide from beneath the long axis of the astragalus; however, the displacement that takes place here is less than the angulation that takes place in the midtarsal and forefoot areas. The resultant effect is that the position of the os calcis in relation to the toes is lateral to the leg, this position being maintained by the tight Tendo Achilles. Since the acting upward force lies lateral to the ankle joint, there is a stretching of the contracted soft tissues on the medial aspect of the ankle.

It would seem that these procedures for correction of the first two components of clubfoot are pretty well agreed upon and that they are pretty well effected by most; however, when it comes to the equinus deformity, it would seem that there is undue haste in releasing the patient from plaster. It is not sufficient to carry the foot into "slight" dorsiflexion. Recurrence is too frequent. It has been the rule with the author for some time to be satisfied with nothing less than extreme dorsiflexion. By this is meant dorsiflexion in the valgus position sufficient to enable the fifth toe to touch the leg. This might appear alarming, but is very easy to achieve and can be gained in any child's foot that has been brought to dorsiflexion in excess of 90 degrees. Only a few additional manipulations and castings are required. It is to be advised, however, that in the last few manipulations one should make certain the upward pressure is exerted near the midtarsal joint in order to obviate development of a rocker foot. Once a fair amount of dorsiflexion has been obtained, it is surprising how simple it is to reach the ultimate position.

Since this method has been adopted there have been no recurrences requiring casts.

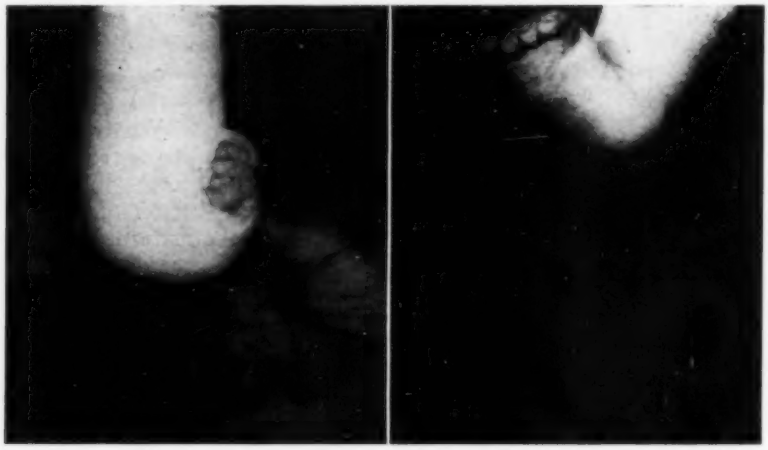

Fig. 1, Left
Fig. 2, Right

The number of cases is admittedly not large, but includes feet treated elsewhere which have recurred following periodic castings. It might be questioned that the correction is extreme enough to produce persistent cancaneous or planus; in answer to this, assurance might be given that the foot returns to a normal plantar position all too readily. In one of the older patients it was thought best to have the parents continue stretching the gastrocnemius by gentle manipulation in order to be certain that a return to equinus did not occur.

During the stage of forefoot and ankle varus correction it is advisable to use long leg casts with the knee flexed to 90 degrees. This serves several useful purposes. In the small child, especially in the presence of equinus, it prevents the patient from kicking the casts off. It prevents the patient from standing. Perhaps most important of all, it permits better retention of the correction of the forefoot adductions by limiting internal rotation of the cast on the longitudinal axis of the leg.

True tibial torsion has not been seen. The deformity in clubfoot lies distal and anterior to the astragalus and when this is corrected completely there is a disappearance of what had been an apparent rotation of the tibia.

Retentive braces have not been used in the post-casting period. It has been found sufficient to have the patient sleep in his shoes, which should be of the high top variety. This is to prevent the feet from dropping into plantar flexion during the normal relaxation of sleep. When it is considered that a small child sleeps one-half of each 24 hour period, the importance of this prophylactic measure is apparent. The parents are advised to remove the shoes only for the purpose of bathing and the application of clean stockings. What kind of shoes the patient wears makes little difference so long as it is of the proper size, that it has a firm leather upper and that it has a straight last or slight "toe out". The author has continued to use lateral wedges on the sole and heel. With the strong tendency to recurrence that exists in clubfoot there need be no fear of pes planus.

Correction should be started just as soon as the deformity is recognized, no matter how young the patient. In many newborn infants correction can be readily obtained and the foot held in position by adhesive tape properly applied. It is a rare case that cannot be easily corercted if treatment is begun during the first few weeks of life.

The multiple cast method has been found the most satisfactory for general use. In the larger children the Kite method of wedging has been very helpful and has seemed to provide a certain mechanical advantage in manipulation. It is especially useful in those feet which have been manipulated previously and found stiff at examination. However, it is simpler to remove and replace casts in the small patients than it is to wedge them. The Denis-Browne splint has been found of little value as the sole means of correction, for in the more severe deformities the forefoot adduction and equinus are frequently inadequately adjusted. It does serve to loosen the foot and make it more pliable, but this can just as readily and more simply be achieved by cast application.

In the older children, where ligamentous contractures are so advanced that articular

damage might result from the force of manipulation required to effect any change in position, there are soft tissue procedures which may be of considerable benefit. A typical case is the child between six and 10 years of age who has had a history of repeated episodes of inadequate treatment interrupted by periods of ambulation. The Brockman procedure may be of much help, but failure will be obtained and the procedure criticized unless care is taken to carry it out in detail. The capsule of the astragalo-scaphoid joint must be completely incised in its superior, medial and inferior aspects and all fibers of the calcaneo-scaphoid ligament sectioned before mobilization of the foot can be effected. The Tibialis anticus may rarely be found severely contracted and bowstrung across the ankle when the forefoot alignment is restored. Transfer of the tendon to the dorsum of the foot in the cuneiform area is indicated. This is seldom required in the ordinary clubfoot, but has been found necessary and helpful in the equinovarus deformity associated with Arthrogryposis. The tendon is never transplanted to the lateral aspect of the foot.

Bone surgery is contraindicated before the age of 10 in girls and 11 in boys, if growth disturbances are to be avoided. This includes the procedure of decancellation also; preservation of the epiphysis of the bone is more important than preservation of the articular cartilage.

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INFANTILE CORTICAL HYPEROSTOSES*

A CASE REPORT

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A little over three years ago Caffey described a new syndrome, Infantile Cortical Hyperostoses.[1] His first report included four cases which were characterized by onset during the first three months of life, tender soft tisue swellings, fever, irritability, cortical thickening of various bones of the body, and a benign, self-limited course. A later communication indicated that this same process may affect children up to two and one-half years of age and may involve practically any bone of the body including the flat bones of the skull.[2] Smyth, Potter, and Silverman reported seven cases which undoubtedly represent the same syndrome.[4] Extensive laboratory studies including biopsy examination of soft tissues and bones have shed no light on the condition as to etiology. Others reported isolated cases suggesting that these changes in soft tissues and skeleton may be due to some infectious process in some distant part of the body.[5 3]

The purpose of this paper is to report a case which fulfills the diagnostic criteria of this syndrome.

Case Report: Number 145-308, C. A., a colored female baby, was seen at Crippled Children's Hospital on March 23, 1948, because of swelling around both eyes and jaw, fever, irritability, and failure to gain weight. She had been born in this hospital in November, 1947 at 36 weeks gestation following premature separation of the placenta. Birth weight was approximately four pounds, eight ounces. During her eight week stay in the hospital nursery she had three episodes of rather severe diarrhea.

Eight weeks prior to this present illness a small hemangioma of the skin of the middle toe of the right foot became ulcerated and later infected. A few days later the child became feverish, increasingly irritable which was followed by this soft tissue swelling about the eyes and jaw.

The child had been fed on evaporated milk

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Fig. 1. Note the marked thickening of the mandible on May 13, 1948 with overlying soft tissue swelling which was regressed to normal by February 18, 1949.

with an adequate amount of cod liver oil and 50 mgm. of ascorbic acid three times a day.

Physical examination revealed a four month old colored female 22 inches in length weighing nine pounds three ounces. The rectal temperature was 99.2°. The child was obviously underdeveloped and under nourished and was hyperirritable. There was a moderate amount of periorbital swelling and some swelling over the mandible which was tender. The skin over these areas was smooth and shiny. No superficial adenopathy was noted. In addition the child had an umbilical hernia and a red, swollen, ulcerated lesion of the middle toe on the right foot.

Laboratory examination revealed a negative serology, normal urine studies, Hb. 9 grams, R. B. C. of 4,100,000 and W. B. C. of 11,750 with 69 per cent neutrophiles, 2 per cent stabs, 1 per cent eosinophiles, and 30 per cent lymphocytes.

Radiographic examination revealed the heart and lung fields to be normal. Subperiosteal bone formation was noted along the shafts of both humeri. The mandible showed soft tissue swelling and cortical thickening. The right foot showed a soft tissue swelling of the middle toe with no evidence of bone reaction. Fig. I and II.

Impression: Infantile cortical hyperostoses and ulcerated, infected hemangioma of toe.

The lesion on the toe was treated with warm soaks and later with small doses of x-ray therapy and regressed quite satisfactorily.

Follow-up studies disclosed that on April 16, 1948, the patient was still quite irritable and the soft tissue swelling of the mandible persisted. Radiographic examination showed considerable thickening of the mandible, right, clavicle, both radii, with a minimal amount of periostitis of the remaining long bones. By May 13, 1948 the swelling about the jaw had subsided and this region was no longer tender. Neither was it tender over the right clavicle. Films showed some regression of the previously described cortical thickening. X-rays on June 11, 1948 showed that some periosteal thickening of the mandible and right clavicle still persisted. On her last examination in February 18, 1949 there were no constitutional symptoms and only a very minimal amount of resid-

Fig. 2. There is moderate periosteal thickening of the right clavicle on May 13, 1948 which has disappeared on February 18, 1949.

ual thickening of the mandible with the remainder of the bones appearing normal.

COMMENT

As in other reports the outstanding features of this case included soft tissue swellings — in this instance, overlying the mandible and right clavicle, subperiosteal bone formation of various bones, the occurrence in a young infant, and a benign self-limited course. The diagnosis here offered little difficulty inasmuch as we had access to the exhaustive and comprehensive studies of Caffey and Smyth. However, as Smyth pointed out, cases which would seem to fit into this syndrome have been reported in the past as "atypical scurvy", "traumatic ossifying periostitis of the new born", "hyperplastic periostitis" etc.

In the differential diagnosis one would have to include syphilis which should be ruled out by serologic methods. Acute osteomeyelitis might pose a problem due to the soft tissue swelling, fever, and periostitis but serial radiographs will exclude this diagnosis. Scurvy might be thought of but would surely be rare under six months — the age when most of these cases occur. Also, the long bones are not decalcified and do not show the characteristic metaphyseal changes. In addition, one could make a vitamin C level determination. Pulmonary osteoarthropathy might conceivably be represented but with no evidence of chest pathology and the absence of clubbing of the fingers, this diagnosis would be untenable. Neoplastic disease might be thought of but the multiplicity of involvement and benign course as followed radiographically and clinically would rule out this possibility.

The radiographic findings may show an overlying soft tissue shadow with a laminated periosteal reaction which may be so marked as to double the diameter of the bone. The cortex may be quite irregular. The mandible, clavicles, femora, and radii are involved the most frequently but apparently almost any bone in the body including the flat bones may be involved. In Caffey's first description three of the four cases developed a pleural effusion, but this was coexistent with rather marked involvement of the ribs on the same side. In the case of the long bones, the middle three-fourths of the shaft seem to be involved more extensively with little or no involvement of the metaphyses or epiphyses.

There apparently are no specific laboratory findings. Biopsy of several of these cases report periosteal new bone formation, fibrous tissue replacement of marrow with no evidence of any old or recent hemorrhage. Also irregular clumps of proliferating cartilagenous cells instead of the regular cell column. Surrounding muscle tissue appeared degenerated with fatty and fibrous replacement.[4]

We have nothing to contribute to the etiology. Upper respiratory infections have been indicated but no correlation between these lesions and such infections has been worked out. Viral infections or an allergic response have been postulated but lack substantiating evidence. In this case the three bouts of diarrhea during early infancy and later the infection of the ulcerated hemangioma of the toe really offer no satisfactory explanation for the latter disease.

No specific therapy was employed in this case. Radiographs of the skeleton taken 11 months after the onset of the disease show only a minimal amount of cortical thickening of the mandible and the child is apparently making a complete return to normal. This would be in complete accord with other observers.

CONCLUSION

A case history is presented which we believe fits the recently described syndrome, Infantile Cortical Hyperostoses. This is apparently the first case to be described in a Negro.

Note: This patient was recently seen by us and the patient has developed normally.

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THERAPEUTIC CONFERENCE

The University of Oklahoma School of Medicine
Presented by the Departments of Pharmacology, Medicine, and Otorhinolaryngology.

VASOMOTOR RHINITIS

ARTHUR A. HELLBAUM, PH.D., M.D., HAROLD A. SHOEMAKER, PH.D., RAY M. BALYEAT, M.D., LEE K. EMENHISER, M.D., AND HARRY A. FORD, M.D.

DOCTOR HELLBAUM: This conference concerns seasonal and perennial rhinitis, a disease of the nose and paranasal sinuses, which results from an allergic reaction. We shall assume that the patient does have rhinitis, that the diagnosis has been made, and we will limit our discussion to the therapeutic aspects of the subject. The gross pathologic changes of vasomotor rhinitis are those of an acute inflammation of the mucosa. The mucous membrane is edematous and hyperemic. There is a diffuse, thin mucous secretion which has a few epithelial cells and eosinophils. The mucosa of the paranasal sinuses behaves in essentially a similar manner to that of the nasal passages. The most frequent causative agent for this disease is pollen, although there are other conditions such as atrophic rhinitis, in which no sensitivity to pollen is demonstrable, but most of these cases do show a sensitivity to dust, feathers or other allergies.

Our first discussant will be Doctor Balyeat, who is widely known for his success in treating this disease. His topic is the therapy of vasomotor rhinitis by desensitization.

DOCTOR BALYEAT: As Dr. Hellbaum stated, approximately 98 per cent of these patients with seasonal hay fever have various pollens as a causative agent. Seasonal hay fever can of course be produced by something besides pollen, such as cottonseed, or some other substance to which people are exposed during certain seasons. Perennial hay fever is usually the result of causes other than pollen. This group of allergens includes animal danders, foods, molds, and a large number of other substances.

We must consider two things in the therapy of these patients. First, eliminative measures, and second, desensitizing measures. There are a number of means of producing desensitization to pollens. Pollen may be given orally as a desensitizing measure, but this practice has almost been discontinued in this country, since the amount of pollen which is absorbed cannot be regulated. Probably the most successful means of administration is by subcutaneous or intradermal injection. One plan of attack is to begin desensitization two to five months before the season begins, giving injections every three or four days, and thus reaching a maximum dose before the season starts. Another plan is to continue injections throughout the year, keeping a high antibody titer at all times, and by this means extend the intervals between the injections to 14 or 21 days, depending upon the patient.

Patients vary greatly in their ability to become desensitized and in their ability to develop antibodies. They also vary in their ability to handle the extracts. Sometimes it is necessary to begin with dilutions of 1 to 100,000 more or less, and sometimes dilutions may be begun with concentrations as high as one in 10 or one in six. With the later dilutions desensitization can be carried out very rapidly. It is of interest to note that children usually handle almost as large a dose as an adult. During the hay fever season intradermal rather than subcutaneous injections have been found most useful, since antibodies seem to develop more rapidly following intradermal injections.

Desensitization is of course one of the most satisfactory procedures; however, in treating the perennial types of hay fever it is also necessary to determine the substances to which the patient is sensitive and eliminate them from the diet or from the sur-

*This report represents the recording of a Therapeutic Conference held in the auditorium of the University of Oklahoma School of Medicine. These conferences are held each Monday at 4:00 P.M. and are attended by the upper classmen in the School of Medicine, interns, residents, and other physicians. Any physician is welcome to attend and participate. The conferences are conducted under the sponsorship of the Department of Pharmacology.

roundings of the patient. Some patients are sensitive to a number of things. A patient may have both seasonal and perennial allergy. If the patient has first a perennial allergy upon which is superimposed an allergy to pollen, it may be extremely difficult to find the seasonal period during which this patient has his pollen allergy. If on the other hand, a patient becomes sensitive to pollen first and then picks up an allergy to, say the animal dander group, he will have definite seasonal incidents until he becomes a perennial hay fever patient. The treatment of either of these groups of patients, after both types of allergy are present, is to desensitize both with pollens and with the substance causing perennial hay fever, or to desensitize to certain substances and to remove the other allergens from his environment.

We feel that it is important to desensitize all hay fever patients, since approximately 35 to 60 per cent of people with seasonal hay fever and 50 to 75 per cent of the people with perennial hay fever will develop asthma. Patients will often have hay fever until they are 45 to 50 years of age; then after atrophy of their nasal mucosa the bronchial tree will become sensitized and these patients frequently develop asthma.

DOCTOR HELLBAUM: Dr. Balyeat, what is the status of the use of histamine in the treatment of allergic symptoms?

DOCTOR BALYEAT: Histamine has been used in urticarias of various types with considerable value. In many cases of hay fever, both seasonal and perennial, it is worth using as a palliative measure.

DOCTOR HELLBAUM: It is said that between three and four per cent of all individuals in this country suffer from hay fever. We also know that allergies are transmitted from one generation to the next and that there is indeed a tendency for inbreeding of this characteristic, since sufferers from allergy are quite often sympathetic toward each other. Associated with hay fever are of course the difficulties involving the sinuses. The paranasal sinuses may become secondarily infected and this disease may be extremely persistent and difficult to treat as a complication. We have asked Dr. Ford to discuss the problem of vasomotor rhinitis and its complications from the standpoint of the otorhinolaryngologist.

DOCTOR FORD: Persons suffering from vasomotor rhinitis are quite susceptible to sinus infections because of interference with the airway in the nose. The first principle of treatment in this condition is to establish an airway. This may be accomplished in a number of ways. Doctor Balyeat has discussed the application of desensitization in this process. It may also be done by surgery. Among those conditions which must be considered in this disease are bony anomalies such as deviated septum, certain conditions involving nasal polypi, which must be removed in order to clear the airway. Once an airway has been established the remainder of the treatment is to stay out of the nose.

This brings us to a discussion of nose drops, which are in general contraindicated. When nose drops are used there is an initial vasoconstriction and a secondary vasodilation. The secondary vasodilation produces a boggy mucous mebrane which does not allow free pasage of air. The situation after the secondary vasodilation is then as bad, if not worse, than it was prior to the instillation of drops. If a patient has been using nose drops for a long period of time, it may be extremely difficult to get his nose open. In these patients it is often necessary to stop the use of nose drops entirely, and, while they will be miserable for a period of several weeks, they may eventually improve sufficiently to get along. On the other hand, many of these patients will require turbinate cautery or even turbinate removal if other means such as desensitization fail.

The exception to the general rule against nose drops is the patient who develops a secondary sinus infection and in whom we need to establish drainage. If sufficient drainage cannot be established by means of the vasoconstrictors about the orifices of the sinuses, it may not be possible to avoid surgery. Every effort should be made to treat simple vasomotor rhinitis by medical means. If these attempts fail, then a surgical procedure may be contemplated. The treatment of a secondarily infected sinus however is almost always surgical. Adequate drainage in this disease must be established. In addition to the surgery, the allergy must also be controlled or the results of surgery will be very disappointing.

DOCTOR HELLBAUM: Thank you, Doctor Ford. Now we will ask Doctor Emenhiser to discuss cautery and the topical application of drugs in the treatment of vasomotor or allergic rhinitis.

DOCTOR EMENHISER: When a patient walks into my office he has already been using every kind of nose drop the drug stores sell and he generally has had his nose cau-

terized, because they go from one doctor to another. When they get to my office I recommend stopping the use of nose drops and tell them to give the nose at least one or two month's rest without any kind of local medication. I think there are many people walking around with stopped-up noses that they have given to themselves by using the vasoconstrictors.

DOCTOR HELLBAUM: When do you use nose drops? And if you use nose drops do you use the aqueous or oily solutions?

DOCTOR EMENHISER: I only use nose drops for the acute cold due to infection to shrink the mucous membrane of the nose. There has never been a nose drop made that has cured a case of allergic rhinitis. I don't want my patients to use them even temporarily. They will get to liking them and use them more and more, until they get a vasomotor paralysis, which is worse than the allergy. So I don't think nose drops have a place in treating anyone's allergic nose. Any time you use nose drops, put it in an aqueous solution and never in oil. There might be an exception to the rule occasionally, but as a rule, always use aqueous nose drops.

DOCTOR HELLBAUM: What about the use of chemical cautery? Does it do anything but give temporary relief?

DOCTOR EMENHISER: Chemical cautery used to be used a lot. The idea is that by streaking a red-hot wire or a chemical across an area, a portion of the mucous membrane is destroyed. This procedure has little place in the treatment of the nose. Cauterizing the turbinate will not cure anything either. It is only a temporary measure.

DOCTOR HELLBAUM: Thank you, Doctor Emenhiser. Now we will ask Doctor Shoemaker of the Department of Pharmacology to discuss some of the antihistaminic drugs with perhaps some mention of the sympathomimetic drugs, which Doctor Ford and Doctor Emenhiser have mentioned.

DOCTOR SHOEMAKER: There is no drug which will cure vasomotor rhinitis. Perhaps the closest approach to a cure is the use of a specific antigen causing the disease in a particular patient. All other measures which are available therapeutically afford symptomatic relief. Many of these drugs are strictly temporary measures. This is especially true of such drugs as epinephrine. Theoretically drugs may relieve the symptoms of vasomotor rhinitis in four ways. First, by the use of the autonomic drugs having a vasoconstrictive action; second, by the destruction of histamine, assuming that the histamine theory is correct; three, by decreasing the susceptibility of the shock tissue to histamine or the H substance; and four, by in some way preventing the union of antigen and antibody so that histamine will not be liberated. The autonomic drugs most commonly used are the sympathomimetic drugs. These drugs simulate the action of the sympathetic nervous system. Some are administered by inhalation, some by local application in the form of solution, either in oil or in water, although the aqueous solutions are preferred.

A second means of treating this condition is by the destruction of histamine in the tissues. Histaminase was used for this purpose under the name of Torantil, but it has not proved successful. The third method is by decreasing the susceptibility of the shock tissues, and is the theory upon which desensitization is founded. Efforts have also been made to administer histamine orally, subcutaneously, and intravenously, and thus accomplish this end.

Recently the anti-histaminics have been introduced into medicine. Many of these drugs are now available. No doubt as the months go by the list of available preparations will continue to grow. Loew describes the anti-histaminics as those drugs which are capable of diminishing or preventing some of the pharmacological effects of histamine and which do so by a mechanism other than the production of pharmacological responses diametrically opposed to those of histamine. This definition precludes the use in this group of the sympathomimetic drugs. Anti-histaminic drugs are rather peculiar in their action. Some of them have a quinidine-like effect. Others have a sympathetic stimulant effect and others an atropine-like effect. There is no evidence that the anti-histaminics act by destroying histamine. They seem rather to prevent the access of histamine to the effector substance in the cell, which results in the clinical picture which we see in allergy. This so-called blocking effect is demonstrable in isolated tissues and organs. There is no evidence at present that these drugs in any way affect the antigen-antibody reaction. Some workers feel that the activity of the anti-histaminic drugs is due to their local anesthetic effects. Some of these drugs have local anesthetic potency several times that of procaine, and procaine itself has been used in treating certain allergic manifestations.

DOCTOR HELLBAUM: Doctor Ford and Doc-

tor Emenhiser have mentioned the use of nose drops in these conditions. I would like to know Doctor Balyeat's concepts as to their use in nasal allergy.

DOCTOR BALYEAT: It is true that if people begin to use nose drops and continue to use them indefinitely, the mucous membrane will become more and more boggy and eventually they will be worse off than before. However, I believe there is a place for nose drops. Seasonal hay fever patients who have their difficulty for only a short time may use nose drops at the time of their greatest difficulty and no particular harm is done. This is especially true in allowing them to get a good night's sleep. On the other hand, the perennial hay fever patient often uses nose drops much to his detriment. I should like to say a few words about the anti-histaminic drugs which have a very unusual action. There is a great variation in their action. Quite often with children we see one patient who can take very small doses of ephedrine, for example, and be quite stimulated by it; while on the other hand, another child will take approximately the same amount of ephedrine and become very drowsy. This is also true in adults as much as it is in children. The anti-histaminic drugs also show very wide variation. One patient will be able to take Benadryl in the usual therapeutic amount with no untoward effect, while another may not be able to take it at all because he becomes so groggy. We have reached the point where we do not advise people who drive cars to use Benadryl or other anti-histaminics during the day. We feel that they may use this drug in order to get a good night's sleep, if they take it at bedtime. Many times, if a child takes one of these anti-histaminic drugs at night he will do very poorly in school the next day. It seems to interfere with his thinking and other activities. We feel then that these drugs should be used carefully only in the evening and then only if the mother finds that the child is wide awake the next morning. In our own experience we have found that Benadryl is often more effective than Pyribenzamine; however many patients have a better effect from Pyribenzamine than from Benadryl. One thing I wish to mention at this time is something I want Doctor Emenhiser to discuss. He mentioned the turbinates a moment ago. Thirty years ago the nose and throat men took out turbinates right and left, and of course to me it was so illogical because the turbinate is the strainer, the humidifier and the radiator. If we are going to take the turbinate out and let those things to which the individual is sensitive be taken down into the bronchial tree, then asthma will be encountered. At the present time not many are removing turbinates, but then the best ear, nose and throat men in this city and other cities were taking out lots of turbinates. The thing that happens to the individual who has perennial hay fever differing from the individual who has seasonal hay fever very promptly develops a chronic infection of the paranasal sinuses. Seasonal hay fever doesn't develop paranasal sinuses infection very often. The perennial hay fever almost invariably in due course of time will develop into a paranasal sinusitis. I think it is due to the fact that the individual who has seasonal hay fever will have his seasonal bout, and then be perfectly well. The nasal mucousa is normal and it gives the sinuses a chance to drain. The perennial hay fever patient has this chronic congestion the year round, has a chronic congestion during the period in which we have our acute respiratory infection; consequently they develop the superimposed infection. It makes it a very trying, complicated picture of a vasomotor rhinitis associated with a chronic generalized, so to speak, sinusitis of the frontal sinuses, etc. That brings up therefore a question of treatment.

DOCTOR EMENHISER: In treating secondary infection from chronic vasomotor rhinitis treat it just the same as if they didn't have the allergy which caused the original trouble. In other words, if they have a maxillary sinus full of pus, wash the sinus out, doing it several times if necessary, and treat it the same as if they didn't have allergy. However you had better inquire in their history about sensitivity to certain drugs. If you fill the sinus with penicillin and the patient has shown a previous reaction, you encounter a great deal of trouble. Any time you put a drug inside a sinus, be sure you ask about sensitivity to drugs. I use 5 or 10 cc. of whatever antibiotic I am going to use after I finish washing out the sinus. If he is very allergic, just use salt water and nothing else. Never put a drug in the maxillary sinus.

Patients will come in with the nose full of polyps and pus coming out of their nose because the polyps have the natural opening stopped up, which results in a regular cesspool, so take the polyps out in order to give him better ventilation, but don't tell

him that you are going to cure any allergy by taking the polyps out. Give him some relief and impress on him that you are only removing some obstruction that is due to the allergy — not tumors or cancers or anything which will alarm him. Take the polyps out and that will help temporarily, but be sure you keep on with the allergic treatment. They might grow back, thus explain this to the patient so that he isn't surprised a couple of years later if they do grow back. In addition, we use antibiotics systemically. They are much more efficacious when administered in this manner than when placed directly in the sinus. The dosage in sinus disease is the same as it is for an acute infection. We give 50,000 units intramuscularly every three hours day and night. Another method is to administer penicillin in amounts of 300,000 or 400,000 units once or twice a day in some preparation which delays its absorption.

DOCTOR SHOEMAKER: I would like to add something further in regard to the care necessary in the use of the anti-histaminic drugs. Doctor Balyeat mentioned the fact that they produce drowsiness and are probably a causative factor in many of the accidents on the highways. Recently one of the airplane companies has issued very definite instructions to their pilots not to attempt to fly a plane if they have been taking any of the anti-histaminic drugs within a 24-hour period. However I feel that we should go a little bit farther in stressing the care necessary in the use of the anti-histaminic drugs.

A question has been asked as to whether or not there are any known cases of agranulocytosis due to the use of the anti-histaminics. I don't believe that any of the anti-histaminic drugs should be used over a long period of time in the larger doses unless frequent checks are made of the blood picture. Cases of agranulocytosis have been reported. There are not many cases, but they do crop up. Then there are other detrimental effects which are possible but of which there are no definite reports. There are many other factors that might be considered as far as the anti-histaminics are concerned, but I am thoroughly convinced that they should not be administered except under the careful supervision of a physician. If they are to be administered over a long period of time, check the blood to see that there is no change in the white cell count. At least don't wait until definite symptoms have developed.

DOCTOR HELLRAUM: Doctor Balyeat, a statement has recently been made and we have a question here which has come from the audience asking if the anti-histaminics are more effective when combined with desensitization. What are your ideas on this subject?

DOCTOR BALYEAT: It is certainly true that in a mild case of hay fever the anti-histaminic drugs work very well, but in the severe case they often do not work as well. Whether or not there is any potentiation of effects using the two together, I am unprepared to say. However it certainly seems logical that if we are improving a patient with desenitization, the anti-histaminic drugs would work better under these circumstances.

NEW MEMBERS

The following became members of the Oklahoma State Medical Association in May, 1950:

J. W. Ambrister, M.D., Hobart (Kiowa-Washita Society)

Dean C. Walker, M.D., Tulsa (Tulsa County Society)

Loraine Schmidt, M.D., Stillwater (Payne-Pawnee Society)

J. Ronald Garst, M.D., Oklahoma City (Oklahoma County Society)

Fred W. Becker, M.D., Altus (Jackson County Society)

Malcolm Mollison, M.D., Altus (Jackson County Society)

Kenneth L. Peacher, M.D., Waynoka (Woods County Society)

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Council on Pharmacy and Chemistry: New and Non-official Remedies, 1949, Xanthine Derivatives, Philadelphia, J. B. Lippincott Company, 1949, p. 323.

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President's Page

It is a distinct honor to be selected President of the Oklahoma State Medical Association. It is also a privilege and an honor to succeed Dr. George H. Garrison who has been so untiring and conscientious in his work. Under his leadership, organized medicine has not only progressed in Oklahoma but has gained recognition and attention among the national organizations. This past year will no doubt be long remembered as a year of outstanding achievement. The members of the Association should congratulate themselves on having had such an outstanding leader, and because of the many sacrifices and efforts on our behalf, we feel that we owe him a real debt of gratitude.

There are always disadvantages in following an administration with such a successful record. This plus the thought of the responsibilities and tremendous amount of work that remains to be done, is it no wonder that your new President shakes in his boots.

This is a year of many problems; the foremost being that of election year. In every human undertaking there comes a time for decision and action. This year is a time of decision that requires positive action on the part of the medical profession. Doctors are confronted with an undeniable paradox. Either they enter into the political arena or see politics enter medicine. The question of compulsory versus voluntary health insurance will be a big political issue in the coming elections.

The recent election in Florida demonstrates what the doctors and their friends can accomplish when frightened into action. An editorial in one of the leading southern newspapers stated: "The removal of Senator Pepper from the United States Senate is the greatest public improvement since the invention of modern plumbing". Yet, the proponents of socialized medicine are not easily discouraged; in fact, they seem to be stimulated to renewed action.

So, in borrowing Doctor Garrison's phrase, now is the time for all doctors, their families, their friends, and all they can influence to register. Acquaint yourselves with those seeking political office and their platforms and on election day go to the polls and exercise that franchise which gives you a right to vote. This is the democratic way to preserve American freedom . . . Medical freedom. This way is the voting way but it is the best way ever devised although it poses grave responsibilities which no doctor can afford to ignore.

Ralph McGill

President.

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STATES ASKED TO SET UP EMERGENCY CATASTROPHE PLAN

Emphasizing the necessary planning that should be immediately undertaken on the state-county city level to protect this country in case of a catastrophe, invasion or internal disaster, the sixth semi-annual meeting of the Council on National Emergency Medical Service of the A.M.A. was held May 6 in Chicago. Attending from the Oklahoma State Medical Association was Ralph McGill, M.D., Tulsa, at that time President-Elect and now Association President.

State Medical Associations, allied professional organizations, government agencies, and military forces were represented at the meeting. Stressing the importance of setting up the necessary facilities and personnel, the Council was urged to instigate a program of postgraduate training of the medical and allied professions caring for casualties with the medical profession acting as the teaching group. The proposed program will be activated by the Oklahoma State Medical Association as soon as possible.

The Central Maine General Hospital Catastrophe Plan (Lewiston, Maine) was presented to the group as a tentative plan for other states to follow.

VOLUNTARY HEALTH INSURANCE CONFERENCE DRAWS OKLAHOMANS

Designed to bring into contact all agencies offering voluntary health insurance to the public, a conference was held in Fort Worth May 6, 1950, sponsored by the Council on Medical Service of the American Medical Association.

Representatives from Oklahoma attending this Southern Regional Conference on Voluntary Health Insurance were George H. Garrison, O.S.M.A. 1949-50 President; Mr. N. D. Helland, representing Blue Cross and Blue Shield; Mr. Dick Virtue and Mr. Lewis Sale, Oklahoma Accident and Health Underwriters Association; and Dick Graham, O.S.M.A. Executive Secretary.

States invited to participate were Arkansas, Kansas, Louisiana, Mississippi, Texas and Oklahoma. All states invited were represented.

Similar meetings are scheduled for South Carolina, North Dakota and Utah. The meetings are planned to cover areas within the majority of the states having less percentage of people covered in voluntary health plans than the national average. The conferences bring together agencies both non profit and commercial. National average for non profit plans for hospitalization coverage is 22.17 per cent. Oklahoma's coverage in hospitalization is 15 per cent; and medical and surgical, eight per cent. The meeting brought about the discussion of the problems of contracts, availability to the public of voluntary health insurance, and the necessity for like meetings to be held at the state level between representatives of the hospitals, medical profession and the voluntary health plans offering health and medical care to the public. It is contemplated that such a meeting will be held in Oklahoma in the near future.

PHYSICIANS BUSY BUILDING, REMODELING, ENLARGING

Throughout the state physicians are building new clinics, moving to remodeled offices or enlarging their present office space. According to information received through the clipping service at least one dozen doctors are practicing in new or remodeled offices.

In Bartlesville five physicians have banded together to give Bartlesville one of its finest pieces of modern architecture in a building named the "Medical Center". Physicians who have moved into this building are H. C. Weber, M.D., George M. Tulloch, M.D., Forrest C. Lawrence, M.D., C. L. Johnson, M.D., and E. E. Beechwood, M.D. The physicians are operating as family practitioners and not as a clinic.

The Bartlesville Medical Center has 7200 feet of floor space. It is being finished in a pastel shade of blue. Each office has an individual waiting room and two treatment rooms. There is a central lobby at the front entrance. A modern pharmacy is available in the building plus a complete laboratory. An emergency room for minor surgery is also available.

Ned Burleson, M.D., Prague, has constructed the Prague Clinic, bringing the most modern clinic facilities to Lincoln County. An L shaped building, of white asbestos shingles, it has a semi-flat roof of white chipped marble. The ceilings are soundproof and aluminum windows are used exclusively. The floors are covered with plastic and rubber tile. A large reception room leads to offices for the doctors and three examining rooms. At the left of the reception room is a library which is joined to the reception room by folding doors. When these are thrown back, one large room can be formed for meetings. Four rooms designed for two patients each, and one room for three patients — will house a total of eight in the clinic. In addition, there will be a nursery to care for new babies. A drug room, x-ray room and laboratory are located toward the front of the building behind the business office. The operating room, scrub room, sterilizing room and delivery room have pale green walls, a new trend in hospital design. In addition to Doctor Burleson the clinic has a staff of approximately eight people including four nurses, a laboratory technician, receptionist, cook and janitor.

The Cowart-Bowie Clinic in Bristow is in the process of doubling its size through enlargement of the reception rooms, adding four small offices and laboratory rooms and remodeling and redecorating the entire building. Physicians associated in the clinic are O. H. Cowart, M.D., and Carl Bowie, M.D.

Paul T. Powell, M.D., Ponca City, is now occupying newly decorated offices in the Community building in Ponca City. He previously had his offices in the Royalty building.

Three Hobart physicians, J. P. Braun, M.D., J. William Finch, M.D., and J. W. Ambrister, M.D., have moved into a new medical clinic at the corner of Broadway and First Streets in that city. Personnel will include a bookkeeper, laboratory technician and three medical assistants.

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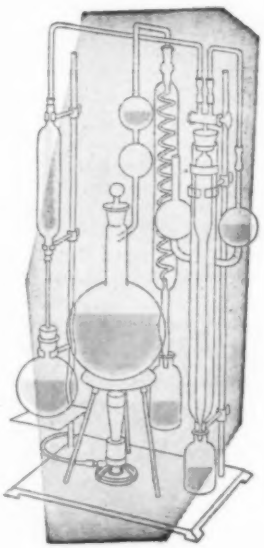

Surgeons are now generally coming to the conclusion that the use of aureomycin preoperatively and postoperatively in all cases is worthwhile insurance against infection. This is particularly true in infections involving the peritoneum.

Aureomycin has also been found effective for the control of the following infections: African tick-bite fever, acute amebiasis, bacterial and virus-like infections of the eye, bacteroides septicemia, boutonneuse fever, acute brucellosis, Gram-positive infections (including those caused by streptococci, staphylococci, and pneumococci), Gram-negative infections (including those caused by the coli-aerogenes group), granuloma inguinale, *H. influenzae* infections, lymphogranuloma venereum, primary atypical pneumonia, psittacosis (parrot fever), Q fever, rickettsialpox, Rocky Mountain spotted fever, subacute bacterial endocarditis resistant to penicillin, tularemia and typhus.

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FIVE PIONEER DOCTORS RECEIVE 50 YEAR AWARD

Five more physicians who turned to medicine before the turn of the century have been presented 50 Year Pins by the Oklahoma State Medical Association. New wearers of the gold lapel pin are F. L. Wormington, M.D., Miami; W. M. Gallaher, M.D., and J. M. Byrum, M.D., Shawnee; H. Lee Farris, M.D., Tulsa; and John R. Callaway, M.D., Pauls Valley.

Presented by President-Elect Ralph A. McGill, M.D., Tulsa, Doctor Wormington received his pin May 17 at a Rotary Club luncheon in Miami. Doctor Wormington was born in Ritchey, Mo., and attended school in Neosho and studied at the Baptist college in Pierce City before entering the University of Arkansas. He was graduated from the University Medical School in Kansas City, Missouri in March, 1900. He moved to Miami April 18 of that year and has practiced there since that time.

Doctor Wormington is a member of the Masonic lodge; in 1909 he was initiated into the Scottish Rite and he joined the Ancient Order of the Mystic Shrine in 1910. He received the 33rd Masonic degree in 1924. He is also a member of the York Rite bodies and was made a member of the Red Cross of Constantine in McAlester in 1925. He is a life member of the Royal Order of Jesters. Doctor Wormington is also a member of the Chamber of Commerce, the Miami Knife and Fork Club, Akmi Shrine Club, and Miami Rotary Club. He is a member of the Ottawa County Medical Society, Oklahoma State Medical Association, Southern and American Medical Associations.

Doctors Gallaher and Byrum were presented their 50 Year Pins at a meeting of the Pottawatomie County Medical Society. George H. Garrison, M.D., O.S.M.A. President, awarded the pins.

Doctor Byrum was born July 9, 1817 in Monroe County, east Tennessee. He was graduated from the Medical University of Tennessee in 1900. Later that year he began the practice of medicine in Sulphur Rock, Arkansas. In 1903 Doctor Byrum moved to Asher and in 1908 he moved to Shawnee.

Doctor Byrum is a member of the Lions Club, Knife and Fork Club, Masonic Lodge, Consistry of McAlester, Central Presbyterian Church. For several years he was Secretary of the Oklahoma State Board of Medical Examiners.

Another Pottawatomie county doctor, William Marshall Gallaher, M.D., was born March 1, 1877 at Wheat, Roane County, Tennessee (now known as Oak Ridge). He attended the U. S. Grant University at Chattanooga from which he graduated in 1900. Later that year he started the practice of general medicine in southwest Arkansas, Little River County. Doctor Gallaher came to Shawnee March 17, 1908. Doctor Gallaher is a member of the Rotary Club, Masonic Lodge, Elks Lodge and First Presbyterian Church. For several years he was a member of the Council of the Oklahoma State Medical Association from the Seventh District.

At the May 22 meeting of the Tulsa County Medical Society, H. Lee Farris, M.D., was presented a 50 Year Pin. The presentation was made by Ralph A. McGill, M.D., President-Elect of the Oklahoma State Medical Association.

Doctor Farris was born in Kentucky and attended Transylvanin College of Lexington, Kentucky. In 1896 he enrolled in the Medical Department of the University of Louisville, later transferring to the Medico-Chirurgical College of Philadelphia, Pennsylvania (later assimilated into the Graduate Department of the University of Pennsylvania). He was graduated May 19, 1900, a member of the first four-year class in medicine to be graduated from any medical school in the United States.

He interned at Samaritan Hospital of Philadelphia and later served a residency at Medico-Chirurgical Hospital of Philodelphia. At the latter institution, he assisted Dr. William H. Rodman in the first major surgical operation ever performed under spinal anesthesia. Dr. Farris is also credited with devising the first machine-driven ambulance seen on the streets of Philadelphia.

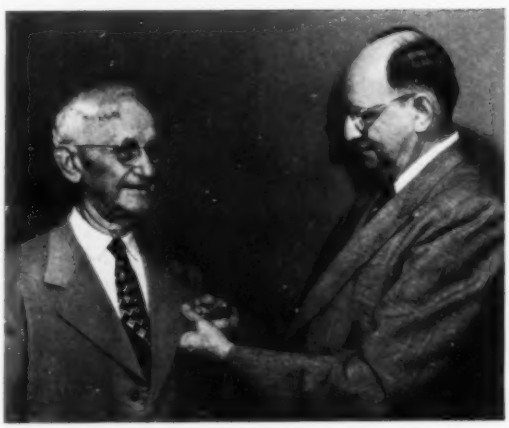
Subsequently practicing eight years at Memphis, Tennessee, Doctor Farris served as Associate Professor of Gynecology at the old College of Physicians and Surgeons of Tennessee, later the Medical Department of the University of Tennessee. He practiced later at Paris, Texas, moving to Oklahoma in 1922 as chief surgeon for the old Oklahoma Hospital of Tulsa. Since 1928 he has been in private practice with offices in the Medical Arts Building of Tulsa. In 1942 Doctor Farris was appointed Medical Director of Douglas Aircraft Corporation, supervising four physicians and 40 nurses in the care of 25,000 plant employees.

A specialist in Surgery, Doctor Farris is a member of the American Medical Association, the Oklahoma State Medical Association, the Tulsa County Medical Society, and a fellow of the American College of Surgeons. He is married and has one son, a professor of Greek at Loyola University.

John R. Callaway, M.D., received his 50 Year Pin from Lewis J. Moorman, M.D., secretary-treasurer of

Left to right—Violet Sturgeon, M.D., Hennessey, 1949-50 O.S.M.A .Vice-President, presents the Pottawatomie County Charter. J. M. Byrum, M.W. and W. M. Gallaher, M.D., both of Shawnee, receive 50 Year Pins from George H. Garrison, M.D., O.S.M.A. 1949-50 President of O.S.M.A.

the O.S.M.A. and editor of the Journal. Doctor Callaway began his service as an understudy to three pioneer Garvin county physicians in 1900. Six years later he was graduated from the College of Physicians and Surgeons at St. Louis and licensed to practice on his own. He received his pre-med training at the College of Idaho. Following his graduation, Doctor Callaway entered the government Indian service. When war came in 1917 Doctor Callaway was transferred to service with the army, being assigned to the Eighth Regimental Cavalry at Fort Bliss, El Paso, Texas. January 1, 1920 he returned to Pauls Valley to again join his father in the practice of medicine.



MEDICINE IN THE NEWS

Thomas C. Points, M.D.

"A State Cancer Clinic Could Save Your Life" — Cline Howard — *Woman's Home Companion*, June, 1950, page 40. Hear ye, hear ye, all ye that cast your eyes and read this article start raising a fuss and a stink for a State Cancer Clinic (and all other forms of government medicine) because it is the only way you will ever be saved from cancer. It does give credit to the local detection centers and in a rare case the family physician for making the diagnosis but nobody is competent to take over from there for treatment except State Clinic. This article describes the M. D. Anderson Cancer and Research Hospital at Houston, Texas. In the midst of this dissertation the statement is made that Europe and England are way ahead of us in establishing this form of treatment. Sure, go on and get socialized medicine and then what? It becomes more and more apparent to me, after these few months experience with this column, that the average physician doesn't realize the tremendous propaganda being put in these magazines for government medicine. Most of us don't take time to discuss these articles with patients and show what they are, instead we just keep on doing our good medicine apparently without concern as to what our patients think they are learning from the lay press.

"Why I Oppose Mercy Killings" — Benjamin F. Miller, M.D. — *Woman's Home Companion*, June, 1950, page 38. I wholeheartedly agree with this man's view on this controverisal subject. He himself was once diagnosed as an incurable, and theoretically a case for Euthanasia. He was suffering from a condition wrongly diagnosed, apparently with some justification. Also he points out the fact that tomorrow a cure for that disease may be announced. Then the weight would be put on any board that might be set up to decide which cases would be suitable for Euthanasia. It is an excellent article for every doctor to read and think about.

"Birth" — Arthur Gordon — *Today's Woman*, June, 1950, page 43. This synopsis of the miracle that follows conception to post natal life is very well written not alone from all it means to the mother and her ordeal but from the baby's welfare. I especially liked the last two paragraphs in this article which are quoted below:

"Both man and woman have their share in this creation, woman's share being far more difficult and demanding and inspiring than man's. But humble people everywhere know that they have not created life, that they have only been used as a means of creating it; that they have been used by the great force that keeps life pulsing forward in the face of overwhelming odds. That force has many names. Scientists have called it the law of evolution. Philosophers have called it creative principle or the impulse of life.

"The humble people usually call it *God.*"

"Dangers for Youngsters in Antihistamine" — Herman N. Bundensen — *Ladies Home Journal*, June, 1950, page 192. The director of Chicago Health Department who wrote this article did a very good job both for the physicians and the parents. The unjudicious uses of these drugs are thoroughly gone into and explained and the rules he gives are true of any drug for children (1) Don't give unless under a physician's direction and (2) Don't leave them where children can reach them to take on their own free will.

Left—Dr. McGill Presents 50 Year Pins to Drs. Wormington, Farris, Carloss and Mitchner (top to bottom).
ROBERT M. BECKER, M.D.

THAT MORE MAY KNOW

The movement to assure the operation of the Oklahoma Medical Research Foundation has received a tremendous impetus as the result of several outstanding gifts made recently.

Mr. J. G. Puterbaugh, McAlester, president of the Foundation led the way with a pledge of $100,000, declaring that "Those of us who have been fortunate enough to accumulate some more than we and our families will need, owe a great debt to those painstaking scientists and technicians who, by dedicating their lives to research, have made it possible for all humanity to have better health and to live longer."

Dr. Coyne Campbell, Oklahoma City physician shall always be remembered as a staunch supporter of the Research Foundation for his unusual and tremendous gift of the Campbell Sanitarium. Doctor Campbell made an outright gift of the hospital to the Foundation and it has been operating as the "Research Foundation Sanatorium" since March 1.

Mr. Clarence Wright, president of the Sunray Oil Company was the third citizen of Oklahoma to make a large contribution to the Foundation. Taking the lead as Tulsa county chairman in the development fund campaign, Mr. Wright and Sunray company pledged $60,000 to the Foundation.

With the stimulus of these large gifts, the campaign has resulted in new pledges totaling nearly one million dollars. The work of securing adequate financing to assure the operation of the Foundation will continue, according to Hugh Payne, until sufficient income is secured to provide independent financing, for five to 10 years.

SPEAKERS ACTIVE

Residents of several sections of Oklahoma have heard the meaning of research explained as it pertains to the average citizen by Dr. Onis Hazel, Oklahoma City physician.

Working as a volunteer, Doctor Hazel has spoken to groups in Seminole, Cushing, Konawa, Ardmore, Stillwater and several other cities, where public campaigns are being held to gain support for the Foundation.

In this activity, Doctor Hazel has been one of a group who have made public appearances on behalf of the Foundation campaign including Mark R. Everett, dean of the O.U. School of Medicine, Dr. Vernon Cushing, W. D. Beard of Ponca City, Dr. W. F. Lewis, Lawton, "Chuck" O'Connon and Kenneth Wallace, Oklahoma City.

RESEARCH HOSPITAL PLANS

The time when construction on the Research Foundation Hospital will begin is drawing close, according to Hugh Payne, general manager of the Foundation.

The structure will extend north from the east end of the Foundation building. It will have 22 beds, and will be so constructed that additions may be made later if desired. Construction is expected to take about one year.

PLEDGE REPORT

The overall total of pledges to the Foundation is now well over the three million mark and work is continuing to reach the final objective of five million. Here are the latest figures.

		GRAND TOTAL	
GROUP	*No.*	*Amount*	*Goal*
Doctors of Medicine	679	821,050.00	525,000
Dentists	228	143,698.41	255,000
Pharmacists	508	133,570.00	300,000
Medical Service Society	1	5,000.00	
Nurses	1236	53,082.25	50,000
Technologists	59	5,555.43	
General	4504	1,749,049.39	1,870,000
	7215	$2,911,005.48	$3,000,000

*M.D.'s long range goal $1,000,000.

ANNOUNCEMENTS

BASIC SCIENCE BOARD. Date for examinations to be given by the board has been set for September 15, 1950 at the University of Oklahoma School of Medicine. Oklahoma City, Oklahoma. Registration will be gin at 7:30 a.m.; examinations will begin at 8:00 a.m.

NATIONAL GASTROENTEROLOGICAL ASSOCIATION. Postgraduate course in gastroenterology will be given at the Hotel Statler, New York City, October 12, 13, 14, 1950. For further information and enrollment write the Association, Dept. GSJ, 1819 Broadway, New York 23, N. Y.

OKLAHOMA CITY CLINICAL SOCIETY. Oct. 30, 31, Nov. 1-2. Oklahoma City.

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MEET OUR CONTRIBUTORS

Clair J. Cavanaugh, M.D., Topeka, Kansas, was co-author of "Infantile Cortical Hyperostoses" in this issue of the Journal. Doctor Cavanaugh was graduated from the University of Iowa in 1947 and took a residency in radiology.

P. E. Russo, M.D., A.B.R., Oklahoma City, is the joint author of "Infantile Cortical Hyperostoses" in the July Journal. Biographical sketch of Doctor Russo appears in the June issue.

Charles S. McCammon, M.D., Navajo Medical Center, Fort Defiance, Arizona, wrote "Dangerous Post-Partum Blood Loss" in this Journal. Doctor McCammon was graduated from Vanderbilt University School of Medicine in 1945 and limits his practice to his specialty, obstetrics. Before going to Fort Defiance, he was with the venereal disease division in Meridian and Greenwood, Miss. Dr. McCammon is a commissioned officer in the U.S.P.H.S. with the rank of surgeon (r) and is a member of the American Public Health Association.

Donald B. McMullen, D.Sc., has an article on "Parasitic Diseases and Problems in Diagnosis" in this Journal. Dr. McMullen was graduated from Johns Hopkins University in 1935 and does teaching and research in parasitology and tropical medicine. He is a member of the Society of Experimental Biology and Medicine; American Society of Tropical Medicine, American Society of Parastology, American Public Health Association, American Microscopic Society, Oklahoma Academy of Science, and American Association for the Advancement of Science (fellow). Now associated with the University of Oklahoma School of Medicine he was previously consultant to the secretary of war, Army Epidemiological Board, Comm. on Schistosomiasis, 1945-46, Philippine Islands and Japan, senior parasitologist with armed forces in far east, 406th Med. Gen. Lab., Tokyo, Japan, 1947-49.

J. L. Richardson, M.D., Tulsa, a graduate of Columbia University in 1939, has a paper on "The Treatment of Clubfoot" in this issue. A specialist in orthopedic surgery, he is a member of the American Board of Orthopedic Surgery, Southwestern Surgical Congress, Southeastern Surgical Congress, and American Medical Association. He has been certified by the American Board of Orthopedic Surgery. Before coming to Tulsa, he practiced two years at Williamson, West Virginia.

J. DeWitt Fox, M.D., B.A., D.N.B., editor of Life and Health, Washington D.C., has an article on "Selection of Blood Donors" in the July Journal. He was graduated from the College of Medical Evangelists in 1946 and is a member of the American Association for the Advancement of Science, American Public Health Association, American Social Hygiene Association, American Medical Writers Association, American Association of Physician Artists and the Electron Microscope Society of America. Dr. Fox interned at Henry Ford Hospital in Detroit and was stationed at San Antonio, Texas, and San Francisco, Calif. during army service. He also practiced in Los Angeles before coming to Washington.

HAVE YOU HEARD?

R. C. Meloy, M.D., Claremore, spoke to members of the Rotary Club of that city on duties and functions of the club service committee.

C. E. Williams, M.D., Woodward, was speaker at the Kiwanis Club luncheon there recently.

G. E. Haslam, M.D., Anadarko, discussed treatment of sinus and allergies at an Apache Rotary club meeting recently.

C. S. Stotts, M.D., Pawhuska, was principal speaker on "Health" at the Franklin PTA.

E. C. Mohler, M.D., Ponca City, has been appointed Kay county chairman in a campaign to raise funds for the Archibald Church library at the Northwestern University Medical School.

McLain Rogers, M.D., former longtime mayor of Clinton, addressed the Clinton Lions club on Clinton as he observed it in the past, as it looks to him now, and as he sees its future.

Rene G. Gerard, M.D., has moved from Atoka to Durant.

H. E. Denyer, M.D., Bartlesville, spoke on "Cancer in Women" at the Medical Assistants Society meeting of that area.

Harry E. Barnes, M.D., Oklahoma City, listed polio precautions when he spoke to the Noble County Council of Home Demonstration Clubs in Perry recently.

Grady Mathews, M.D., Oklahoma City, state commissioner of health, and *Charles R. Kountree, M.D.*, Oklahoma City, chairman of the Board of Health, attended the dedication of Wewoka's new health center.

J. Howard Baker, M.D., formerly of Eufaula, has moved to Quinton, Oklahoma.

M. L. Henry, M.D., and *Richard Harkins, M.D.*, both of McAlester, won first and second place prizes and two other trophies in motor boat races at the first annual Fort Worth Eagle Mountain Lake Marathon recently.

Paul Williamson, M.D., Pawhuska, spoke on "The Family as a Unit from the Doctor's Standpoint" at a recent Fellowship dinner at the First Christian Church there.

Carroll Pounders, M.D., was guest speaker at a Heronville PTA session in Capitol Hill, Oklahoma City.

John Gilbert, M.D., Ponca City, presented a paper on "Fibrocystic Diseases of the Pancreas" at a recent meeting of the Ponca City hospital.

Paul Gallaher, M.D., Shawnee, spoke on "Mental and Nervous Diseases" at the Pottawatomie County Nurses' Association.

C. Riley Strong, M.D., El Reno, announces the arrival of Stephen Robert Strong on April 18, 1950. Doctor and Mrs. Strong also have another son, Clinton Riley Strong, III.

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MEDICAL SOCIETIES AROUND THE STATE

Kay-Noble

John P. Wolff, M.D., Oklahoma City, was guest speaker at the May meeting of the Kay-Noble County Medical Society. Dr. Wolff spoke on "Vascular Disturbances of the Lower Extremities."

Garvin County

At a recent Garvin County Medical Society meeting a resolution was passed praising the work of the late Dr. R. M. Alexander of Paoli.

Choctaw-McCurtain-Pushmataha

F. P. Baker, Superintendent of the Eastern Oklahoma Tuberculosis Sanatorium spoke at the Choctaw-McCurtain-Pushmataha County Medical Society recently. He told the group that miracle drugs recently hailed as wonder cures have worked no miracles in TB Sanatoriums in Oklahoma.

Hughes-Seminole

Physicians from Hughes and Seminole Counties met in Wewoka for dinner and a technicolor film on cancer detection. Three Oklahoma City physicians, J. R. B. Branch, M.D., Peter Russo, M.D., and Everett Neff, M.D., furnished the program.

Pottawatomie County

Approximately 75 doctors and their wives from seven counties attended the annual spring clinical meeting of the Pottawatomie County Medical Society. After a medical conference for the physicians in the afternoon, a social hour and banquet was held at the Country Club. Speakers at the afternoon sesion were Paul Kernek, M.D., Holdenville; Julian Wood, M.D., Seminole; and Earl Muntz, M.D., Ada.

Stephens County

E. B. Thomasson, M.D., and A. J. Weedn, M.D., were hosts at the monthly dinner for the Stephens County Medical Society recently. Guest speaker was J. R. Regan, M.D., of Wichita Falls, Texas.

Greer County

H. H. Howard, M.D., Lawton, discussed the treatment of congestive heart disease at a meeting of the Greer County Medical Society held recently in Mangum.

Logan County

Members of the Logan County Medical Society are pledging their support and recommending that an iron lung be purchased for the Benedictine Heights Hospital polio ward. The fund drive is being sponsored on a voluntary contribution basis by county civic organizations.

Tulsa County

Robert L. Anderson, M.D., Tulsa, spoke on "Problems in the Field of Thoracic Surgery" at the Tulsa County Medical Society meeting May 22.

Tri-County

The public welfare program in Oklahoma and the medical examinations of welfare applicants were discussed at a meeting of the Tri-County Medical Society in Hugo May 9. Guests at the meeting were Virgil Stokes, state director of the Department of Public Welfare; Joe N. Hamilton, Director of the Crippled Children's Commission, Dick Graham, Executive Secretary of the O.S.M.A., and Joseph Kelso, M.D., of the medical advisory committee to the welfare department.

Muskogee-Sequoyah-Wagoner

Dr. Ernest Lachman, professor of Anatomy, University of Oklahoma School of Medicine, spoke on "Anatomical Pathways in the Spread of Cancer" at the meeting of the Muskogee-Sequoyah-Wagoner Medical Society and the medical staff of the Veterans Hospital.

Canadian County

The Canadian County Medical Society, in cooperation with the PTA is holding a health clinic for each school child with periodic examinations to be held throughout the summer. In turn, the PTA is donating $600 to the Medical Society for the new hospital fund.

Pittsburg County

Members of the Pittsburg County Medical Society met in McAlester for the May meeting. Guest speaker was D. H. O'Donoghue, M.D., Oklahoma City.

Kiowa-Washita

Members of the Kiowa-Washita County Medical Society and Auxiliary had a joint dinner May 9 in Cordell. Following the dinner, the physicians held a scientific meeting and the Auxiliary had a separate business meeting.

OBITUARY

JOHN W. RILEY, M.D.
1878-1950

John W. Riley, M.D., Oklahoma City, a past president of the Oklahoma County and Oklahoma State Medical Association, died May 15 following an illness of six months.

Doctor Riley, who was born in Mexico, New York, was graduated from the College of Medicine in Buffalo, New York, in 1878. He practiced in Buffalo five years before coming to Oklahoma City in 1906.

He was active in Catholic church circles and was made a Knight of St. Gregory by Pope Pius XI. He was also a Knight of Columbus.

Survivors include his widow of the home, one sister and one brother, Dr. James T. Riley of El Reno.

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1317 10th St.
Woodward, Okla.

Mrs. Ethel Holcomb
Box 386
Sayre, Oklahoma

BOOK REVIEWS

COMMUNICABLE DISEASE NURSING. Theresa L. Lynch. Second Edition. C. V. Mosby Company. 1949. Price $4.75.

Recently a doctor said he had heard that, "All nurses would soon have to be Ph.D.'s." Be that as it may, the author of this book is a nurse who does have a Ph.D. degree. She is also well qualified in the field of communicable disease, having served for many years as Superintendent of Nurses and Director of Instruction at the Willard Parker Hospital, New York City, N. Y. She is now Dean of the School of Nursing, University of Pennslyvania.

In the preface of this second edition, the author states that the swift succession of events which have contributed to our knowledge of acute communicable diseases, within the past few years, has resulted in changed concepts of treatment, of methods of control, and nursing care. This has necessitated complete revision of all material, although the general outline of the book remains the same as in the first edition which was published in 1942. Previously used tables have been brought up to date, irrelevant illustrations have been omitted, nomenclature has been changed in accordance with most recent opinions, and new technics have been incorporated. A noticeable example is the use of masks. The author has made good use of all research and studies done in this field in the past few years. New chapters added are: Sulfonamides and Antibiotics; Infectious Mononucleosis; Infectious Hepatitis; and Serum Hepatitis. The book is well illustrated showing points in nursing technics as well as color plates of various communicable diseases. There are five appendices which are valuable aids. Appendix B is devoted to concise paragraph discussions of the less communicable diseases and has been enlarged to include such conditions as Haverhill Fever, Q Fever and Schistosomiasis.

In schools of nursing in Oklahoma, this book will be of greatest value when used as a reference. As we have no block of clinical experience in communicable disease nursing, it is too comprehensive for the few hours theoretical instruction given in the majority of our schools. However, it should be a valuable aid to the instructor.—(Mrs.) Juanita Granger Millsap, Clinical Instructor, Wesley School of Nursing.

UROLOGICAL SURGERY. Austin I. Dodson, M.D. C. V. Mosby Company. 1950.

This book, a second edition, makes a very definite approach to simple, brief, complete explanation of everyday surgical problems concerning the genito-urinary tract. With its 645 illustrations, most every commonly encountered surgical problem is considered and necessary illustrations are found.

While being a valuable reference to the urologist, it presents in simple, concise manner a clear picture of the surgical problems necessarily handled by the doctor doing general practice. For example: the opening chapter "Anatomy of the urography." Pre and post operative care, acid-base balance, transfusions and shock treatment are some examples of the common subjects covered briefly but adequately. Radiation therapy, ureterosigmoidal anastamoses, surgical approaches to the kidney, nephroptosis and its treatment, are some of the more complicated subjects dealt with in a manner which would give a lift to either the urologist or the general practitioner who might be dealing with these rather highly specialized problems.

Some of the subject material is covered by contributors and the high quality work of these men make the already masterful structure of the book a more complete balanced unit. I mention a few specific chapters for illustration: particularly "Renal Tuberculosis", "Endocrinology of the Prostate", as examples of fine contributions to this treatise on surgical treatment of urological problems.

The book will furnish a quick reference to those already fairly well informed along urological subjects, but is probably a little too brief to be used as a text for beginners, such as medical students.

—Meredith M. Appleton, M.D.

PRIMER OF ALLERGY. Originally by Warren T. Vaughn, M.D., Third Edition, Revised by J. Harvey Black, M.D., Dallas, Texas, Cloth, St. Louis, The C. V. Mosby Company. 175 pages with 25 illustrations. 1950. Price $3.50.

If satisfactory results are to be experienced in the management of allergic disease, the education of the patient assumes paramount importance, in almost every case. It was with this knowledge that Dr. Vaughn was originally prompted to publish the Primer of Allergy in 1939. The value and popularity of this book is further evidenced by the now available Third Edition and its numerous reprints during the interim between 1939 and 1950.

Unless other means are available for transmitting necessary information to the patient with allergic disease, this book should be recommended for study to all intelligent patients. It is written in a manner that can be ajudged a reasonably good bedtime story. The knowledge and information contained therein is recognized and accepted by all competent allergists.

Further, for the student being initially exposed to the theory and practice of allergy, it is a highly helpful publication giving insight where a scientific explanation might prove initially bewildering.

Dr. Black's revision of the present edition has made what changes were needed by advances in knowledge in the field of allergic disease. Containing the extensive knowledge and experience of these two outstanding allergists, this book can be recommended not only to the general practitioner with a limited experience in the field of allergy, but also to the specialist.

Each of the eleven chapters are packed with readable, understandable information with Chapters X and XI emphasizing both success and failure in allergic management.—George S. Bozalis, M.D.

MEDICAL STATE BOARD QUESTIONS AND ANSWERS. Goepp and Flippin. Eighth Edition. W. B. Saunders Company. 1950.

This book is a Goepp and Flippin brought up to date. It is of peculiar interest to a candidate who wishes to prepare himself for examination, either written or oral. It is cordially recommended to those who may be interested in preparing questions or in answering them.

It is a cross section of review for anyone who is interested in the practice of medicine regardless of his qualifications. It affords an opportunity for a physician to take stock of his personal attitude toward recent trends of medicine. It is good practice for anyone to put himself, at least occasionally, in the hypothetical position and attitude of a candidate for examination.—Clinton Gallaher, M.D.

50 and 3

YEARS TREATING ALCOHOL AND DRUG ADDICTION

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MEDICAL ABSTRACTS

ERYTHROMELALGIA TREATED WITH POSTERIOR PITUITARY EXTRACT. Metz, M. Hill, Dept. Int. Med., Southwestern Medical College, Dallas, Texas; Circulation I:684, April, 1950.

Erythromelalgia, a neurogenic vasomotor disturbance in the extremeties, is characterized by increased redness and pain in terminal portions of the extremeties, more commonly the feet, brought on by increased warmth and by dependency of the limb. "The pain is burning in character, and is aggravated by walking, standing and by covering of bedclothes." The author reports one case of this disease with marked and sustained improvement by the use of the vasoconstrictor effects of desiccated posterior pituitary powder taken by nasal insufflation after breakfast and at 5:00 P.M. in doses of one-third to two-thirds grain.

THE EFFECTS OF MAGNESIUM UPON CARDIAC ARRHYTHMIAS. Enselberg, C. D., Simmons, H. G., and Mintz., A. A., Cardiac Clinic, Gouveneur Hospital, New York City. Am. Heart Journal 39:703, May, 1950.

The authors studied the effects of intravenous magnesium SO_4 (20 cc of a 20 per cent solution, injected rapidly) on various arrhythmias of 25 patients, 24 of whom had either rheumatic, hypertensive or arteriosclerotic heart disease. A side reaction of subjective sensations of heat in the upper parts of the body was noted uniformly immediately after the injection, was a source of only mild discomfort. The magnesium was rapidly excreted, almost entirely by the kidneys, with complete excretion in four to eight hours in the presence of normal renal function. Beneficial cardiac effects were noted principally in reduction of ventricular extrasystoles associated with digitalis intoxication, this action seldom lasting more than a few minutes with occasional transient increases and rarely inducing a short paroxysm of ventricular tachycardia. No consistent effects on auriculo-ventricular conduction were noted so there is no indication to use magnesium in auricular tachycardia, fibrillation or flutter.

ARTERIOVENOUS FISTULAS OF THE LUNGS. Baer, S., Behrend, A., and Goldburgh, H. L. Med. & Surg. Wards, Jewish Hospital, Philadelphia, Pa. Circulation I:602, April, 1950.

The authors point out the bedside clinical diagnostic features of this surgically curable disease, reporting two cases of their own and 23 cases reviewed from the literature. The probable relationship between pulmonary arteriovenous fistula of the lung and familial telangiectasis is pointed out, with at least 50 per cent of patients with the pulmonary arteriovenous shunt displaying vascular abnormalities elsewhere, such as telangiectasis, capillary hemangiomas and spider nevi, and also presenting a high incidence of vascular abnormalities in parents and siblings. Clinical picture — since a significant quantity of venous blood is shunted from pulmonary artery to pulmonary vein without oxygenation in pulmonary alveoli, oxygenation of the blood is decreased and a characteristic triad of cyanosis, polycythemia and clubbing occurs. Hemoptysis and cough result from oozing or rupture of the aneurysms. Cerebral symptoms of headache, dizziness, tinnitus, convulsions and hemiplegia are seen in 50 per cent of cases, which may be secondary to thromboses from the polycythemia or cerebral vascular anomalies. Ausculation usually reveals pulmonary and cardiac murmurs; cardiac size is thought to be related to size of the shunt with its associated increase in blood volume and cardiac work. Chest X-Ray examination invariably reveals one or more abnormal lesions, circular, cylindrical or nodular in shape. Pulsation may be seen in the lesion or at the hilus or on the side of the lesion, are usually not progressive in size. Surgical removal, if possible, is curable.

THE EFFECTS OF POTASSIUM UPON THE HEART, WITH SPECIAL REFERENCE TO THE POSSIBILITY OF TREATMENT OF TOXIC ARRHYTHMIAS DUE TO DIGITALIS. Enselberg, C. D., Simmons, H. G. and Mintz., A. A., Cardiac Clinic and Med. Services, Gouveneur Hospital, New York City. Am. Heart Jour., 39:713 May, 1950.

Using potassium chloride orally in doses of 2-10 Gms. in ventricular extrasystoles (mostly associated with digitalis intoxication) definite diminution in frequency of extrasystoles was noticed in about 30 minutes, maximal effect noted in one to two hours, the effects persisting for at least four hours, occasionally for eight hours and rarely for 24 hours. Auricular tachycardia was abolished in two patients, maximum effect noted at about four and one-half hours after receiving 10 Gms. of the potassium chloride-acetate equal parts mixture. In one case of auricular fibrillation the ventricular rate fell from 72 to 50 after 5 Gms. of KCl but remained irregular; while in another case of auricular fibrillation there was reversion to normal sinus rhythm 24 hours after potassium. In incomplete heart block the A-V conduction time was further prolonged after potassium.

The authors point out that K is rapidly absorbed from the GI tract, diffuses so rapidly from plasma to tissues that it is difficult to raise the serum K concentrations after moderate doses provided normal renal function is present. Excess potassium is rapidly excreted except in presence of renal failure. Doses as high as 10 Gms. increase the serum level only 1-2 mEq per L. Elevated serum levels returned to normal in two to two and one-half hours. It is felt the effectiveness of K in digitalis intoxication is due to a decrease in irritability of the myocardium plus a replacement of K in the myocardial cell, supposedly lost as a result of excessive digitalis. The beneficial effects of K in a patient with ventricular tachycardia were so striking that the authors feel it is the drug of choice to be tried in this arrhythmias.

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TWENTY-FIVE YEARS AGO

(From Our Early Files of Editorial Notes—Personal and General).

DR. E. W. REYNOLDS, Bristow, was recently elected City physician, succeeding Dr. O. C. Coppedge.

DR. J. HUTCHINGS WHITE, Muskogee, is enjoying his trip to Europe, a card from London testifies.

DR. EVERETT S. LAIN, Oklahoma City, is taking some special work at Columbia University, New York, during June and July.

DR. A. J. WEEDN, Duncan, is erecting a new modern two-story and basement brick hospital, with a forty room capacity, with X-ray, etc., and all installations of the very latest patterns, including laboratory.

OTTAWA COUNTY MEDICAL SOCIETY, has purchased a camp resort on the Elk River, and plans to hold its meetings there in future as well as using the resort as an outing place for their families.

DR. FRED S. CLINTON, Tulsa, was elected President of the Medical and Surgical Society of the Santa Fe Railway at their 27th annual meeting in Denver, Colorado, June 22-23, 1925. There were eight states represented at the opening of the session.

OKLAHOMA STATE MEDICAL ASSOCIATION

Executive Office—210-212 Plaza Court, Oklahoma City, Oklahoma. Phone 7-0976.

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